CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, August 17, 1905.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S), and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close	Work.	Place.	On file.	See issue.
Aug.				
*17	Dike	Los Angeles, Cal.	P. & S.	6-22
19	Prison addition	Portsmouth, N. H.	S.	8- 3
*21	Bridge	Concord, Me.	P. & S.	8- 3
*24	Water-works, etc.	Marksville, La.	S.	7-27
*24	Breakwater	Boston, Mass.	P. & S.	8-10
26	Coaling plant	Philippines	S.	5- 4
26	Scale	Washington, D. C.	S.	8-10
*28	Asphalt plant	New Orleans, La.	S.	7-27
Sept.				
1	Steel manufacture	New S. Wales.	S.	3-23
*4	Concrete conduit	Salt Lake City, Utah.	P. & S.	8-10
*5	Drainage work	Miami, Fla.	S.	8-10
*7	Water conduit	Toledo, O.	P. & S.	8-10
9	Derrick	Washington, D. C.	S.	8-10
16	Hoist	Washington, D. C.	S.	8-10

*Work advertised in Engineering News.

NOTE.—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close. Work. Place. See issue.

LIGHT, HEAT AND POWER PLANTS

Aug. 19. Gas mains, Ft. Myer, Va. ..... Aug. 3
Aug. 21. Generator, etc., Moose Jaw, N. W. T. ..... Aug. 3
Advertised, Eng. News, Aug. 3 to 17.
Aug. 21. Electric lighting, Omaha, Neb. ..... Aug. 10
Aug. 24. Gas plant, Ft. Wayne, Ind. ..... July 6
Advertised, Eng. News, July 6 and 13.
Aug. 26. Electric plant, etc., Stoughton, Wis. ..... Aug. 17
Aug. 28. Switch boards, etc., Washington, D. C. ..... July 27
Advertised, Eng. News, July 27 to Aug. 3.
Aug. 28. Gas plant, Winnipeg, Man. ..... Aug. 10
Advertised, Eng. News, Aug. 10 and 17.
Aug. 29. Boilers, etc., Washington, D. C. ..... Aug. 10
Sept. 30. Power plant, etc., Washington, D. C. ..... Aug. 3
Advertised, Eng. News, Aug. 3 to Sept. 21.
Dec. 2. Water power, Porto Rico ..... Aug. 17
Advertised, Eng. News, Aug. 17 to Sept. 14.

BRIDGES.

Aug. 21. Bridge, Bowling Green, O. ..... Aug. 10
Aug. 21. Bridge, Huntington, W. Va. ..... Aug. 3
Aug. 21. Bridge, Concord, Me. ..... Aug. 3
Advertised, Eng. News, Aug. 3 and 10.
Aug. 21. Bridge, Titusville, Pa. ..... Aug. 17
Advertised, Eng. News, Aug. 17.
Aug. 24. Bridge, Mt. Holly, N. J. ..... Aug. 17
Aug. 26. Bridge, Eaton, O. ..... Aug. 17
Aug. 26. Bridge, Dayton, O. ..... Aug. 10
Aug. 29. Bridge, etc., Kansas City, Mo. ..... Aug. 17
Sept. 18. Bridges, steel, Virginia City, Mont. ..... July 20
Sept. 30. Bridges, Porto Rico ..... Aug. 3
Advertised, Eng. News, Aug. 3 to Sept. 21.
Oct. 4. Bridge substructure, Chicago, Ill. ..... Aug. 10
Advertised, Eng. News, Aug. 10.
Oct. 4. Bridge superstructure, Chicago, Ill. ..... Aug. 10
Advertised, Eng. News, Aug. 10.

BUILDINGS.

Aug. 17. Building, Hayward, Wis. ..... July 27
Aug. 17. Post-office, Burlington, Ia. ..... July 13
Aug. 19. Prison addition, Portsmouth, N. H. ..... Aug. 3
Aug. 20. Factory, East St. Louis, Ill. ..... Aug. 17
Aug. 21. Hospital, Southport, N. C. ..... July 27
Advertised, Eng. News, July 27 and Aug. 3.
Aug. 21. Boilers, fixtures, etc., Ithaca, N. Y. ..... Aug. 3
Advertised, Eng. News, Aug. 3 to 17.
Aug. 21. Court-house, Caldwell, Idaho ..... Aug. 3
Aug. 22. Elevators, Washington, D. C. ..... Aug. 10
Advertised, Eng. News, Aug. 10 and 17.
Aug. 22. Buildings, Santa Fe, N. Mex. ..... July 27
Aug. 23. Wiring system, Burlington, Vt. ..... Aug. 10
Advertised, Eng. News, Aug. 10 and 17.
Aug. 24. Apparatus, Lincoln, Neb. ..... Aug. 3
Aug. 24. Buildings, Seattle, Wash. ..... Aug. 3
Aug. 24. Five buildings, Seattle, Wash. ..... Aug. 3
Aug. 26. Hotel, Monmouth, Ill. ..... Aug. 17
Aug. 28. Frame barrack, etc., Delaware City, Del. ..... Aug. 3
Advertised, Eng. News, Aug. 3 to 17.
Aug. 31. Heating apparatus, Burlington, Vt. ..... Aug. 17
Advertised, Eng. News, Aug. 17 and 24.
Sept. 1. City-hall plans, Regina, N. W. T. ..... Aug. 3
Sept. 1. Apartment house, Chicago, Ill. ..... Aug. 17
Sept. 4. Heating system, etc., Huntington, Ind. ..... July 27
Sept. 9. Dwelling, etc., Philadelphia, Pa. ..... Aug. 10
Advertised, Eng. News, Aug. 10 and 17.
Sept. 10. Office building, Omaha, Neb. ..... Aug. 3
Sept. 10. School, Tallahassee, Fla. ..... Aug. 17
Sept. 14. Hotel, Little Rock, Ark. ..... July 6
No date. Heating plant, Pittsburg, Pa. ..... July 27

WATER SUPPLY AND IRRIGATION.

Aug. 17. Pumping machinery, Chicago Junction, O. ..... Aug. 10
Aug. 18. Laying mains, White Hall, Ill. ..... Aug. 3
Aug. 18. Boilers, Milwaukee, Wis. ..... Aug. 17
Aug. 19. Pipe laying, West Springfield, Mass. ..... July 27
Aug. 21. Filter plant, St. Cloud, Minn. ..... Aug. 17
Aug. 21. Reservoir work, etc., Coatesville, Pa. ..... Aug. 10
Advertised, Eng. News, Aug. 10.
Aug. 21. Conduit, etc., Idaho Springs, Colo. ..... Aug. 10
Aug. 22. Reservoir, Marion, Ind. ..... Aug. 17
Aug. 22. Water-works, Arlington, Neb. ..... Aug. 10
Aug. 22. Pumping engine, Edmonton, Alta. ..... Aug. 17
Advertised, Eng. News, Aug. 17.
Aug. 22. Conduit work, New York, N. Y. ..... Aug. 17
Aug. 22. Pumps, motor, Thief River Falls, Minn. ..... Aug. 10
Aug. 22. Laying mains, Detroit, Minn. ..... Aug. 17
Aug. 24. Pipe laying, Framingham, Mass. ..... Aug. 17
Aug. 24. Water-works, Enderlin, N. Dak. ..... Aug. 10
Aug. 24. Water-wks., electric light, Marksville, La. ..... July 27
Advertised, Eng. News, July 27.
Aug. 25. Stand-pipe, Grand Rapids, Mich. ..... Aug. 17
Advertised, Eng. News, Aug. 17.
Aug. 25. Water-works, Fredericton, O. ..... Aug. 17
Aug. 26. Water mains, etc., Bradley, Ill. ..... Aug. 17
Aug. 26. Reservoir, etc., Ft. Moultrie, S. C. ..... July 27
Advertised, Eng. News, July 27 to Aug. 17.
Aug. 26. Boiler, San Antonio, Tex. ..... Aug. 10
Aug. 28. Pumping plant, Winnipeg, Man. ..... July 6
Advertised, Eng. News, July 6 to Aug. 24.
Aug. 28. Water-works, Monroe, Ga. ..... Aug. 17
Aug. 29. Laying mains, Marion, Ind. ..... Aug. 17
Aug. 31. Water-works, sewers, Banff, Alta. ..... Aug. 17
Aug. 31. Water supply, Owensboro, Ky. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to Sept. 7.
Sept. 2. Pumping unit, Niagara Falls, Ont. ..... Aug. 10
Sept. 2. Water-works, Barnesville, Minn. ..... Aug. 17
Sept. 4. Reservoir, Wilmington, Del. ..... Aug. 17
Advertised, Eng. News, Aug. 17 and 24.
Sept. 4. Mains, tank, reservoir, etc., Ames, Ia. ..... Aug. 17
Advertised, Eng. News, Aug. 17.
Sept. 4. Concrete conduit, Salt Lake City, Utah. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to Aug. 31.
Sept. 5. Stand-pipe, Stromsburg, Neb. ..... Aug. 17
Sept. 5. Canal repairs, Turlock, Cal. ..... Aug. 17
Sept. 5. Conduit, pipe, etc., Richmond, Va. ..... Aug. 17
Advertised, Eng. News, Aug. 17 to Sept. 7.
Sept. 6. Filtering materials, Philadelphia, Pa. ..... Aug. 17
Advertised, Eng. News, Aug. 17 to Sept. 7.
Sept. 7. Water main extensions, Norfolk, Neb. ..... Aug. 17
Sept. 7. Water system, building, Wash., D. C. ..... Aug. 17
Sept. 7. Water conduit, Toledo, O. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to Aug. 31.
Sept. 14. Pumping machinery, Columbus, O. ..... Aug. 3
Advertised, Eng. News, Aug. 3 to Sept. 14.
Sept. 11. Well, Fort Hancock, N. J. ..... Aug. 17
Sept. 18. Water pipe, Victoria, B. C. ..... Aug. 17
Oct. 5. Piping, Peru ..... Aug. 17
Sept. 19. Pumps, hydrants, etc., Toronto, Ont. ..... Aug. 3
Advertised, Eng. News, Aug. 3 to Aug. 24.

SEWERAGE.

Aug. 19. Sewers, Norwood, O. ..... Aug. 2
Aug. 19. Sewer, Painesville, O. ..... Aug. 17
Aug. 21. Sewer, Salesburg, Ill. ..... Aug. 17
Aug. 21. Sewers, Piqua, O. ..... Aug. 17
Aug. 21. Sewer, Berea, O. ..... Aug. 17
Aug. 21. Sewers, Cincinnati, O. ..... Aug. 17
Aug. 21. Pipe and specials, Washington, D. C. ..... Aug. 10
Advertised, Eng. News, Aug. 10.
Aug. 21. Sewers, Tulsa, Ind. T. ..... Aug. 10
Aug. 21. Sewer system, Sheridan, Wyo. ..... Aug. 10
Advertised, Eng. News, Aug. 10.
Aug. 21. Sewers, Washington, D. C. ..... Aug. 10
Advertised, Eng. News, Aug. 10.
Aug. 21. Sewer system, Tulsa, Ind. T. ..... Aug. 10
Aug. 22. Sewer system, Santa Fe, N. Mex. ..... July 27
Aug. 23. Sewers, Chicago, Ill. ..... July 27
Advertised, Eng. News, July 27 to Aug. 17.
Aug. 22. Drains, Downers Grove, Ill. ..... Aug. 17
Aug. 23. Pipe sewer, Des Moines, Ia. ..... Aug. 10
Aug. 24. Sewers, Clinton, Ia. ..... July 27
Aug. 25. Sewer, Hammond, Ind. ..... Aug. 17
Aug. 25. Sewers, Rockford, Ill. ..... Aug. 17
Advertised, Eng. News, Aug. 17.
Aug. 28. Sewer, Winona, Minn. ..... Aug. 17
Aug. 28. Sewer, Port Clinton, O. ..... Aug. 17
Aug. 28. Sewer, New Brunswick, N. J. ..... Aug. 17
Aug. 28. 3½ miles of sewers, Ames, Ia. ..... Aug. 10
Advertised, Eng. News, Aug. 10.
Aug. 29. Sanitary sewers, Watertown, Wis. ..... Aug. 17
Sept. 2. Sewers, etc., Newton, N. J. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to Sept. 4.
Sept. 11. Storm sewer, Willoughby, O. ..... Aug. 17

STREETS AND ROADS.

Aug. 17. Block paving, Cincinnati, O. ..... Aug. 10
Aug. 17. Road work, Pittsburg, Pa. ..... Aug. 10
Aug. 17. Macadamizing, Towson, Md. ..... Aug. 10
Aug. 17. Block paving, Macon, Mo. ..... Aug. 3
Aug. 19. Grading, Liverpool, O. ..... Aug. 3
Aug. 19. Macadamizing, Norwood, O. ..... Aug. 10
Aug. 19. Sidewalks, grading, Seattle, Wash. ..... Aug. 10
Aug. 19. Sidewalks, Woodstock, O. ..... Aug. 17
Aug. 21. Grading, etc., Tuckahoe, N. Y. ..... Aug. 17
Advertised, Eng. News, Aug. 17.
Aug. 21. Grading, Boston, Mass. ..... Aug. 17
Aug. 21. Paving, Union, N. J. ..... Aug. 17
Aug. 22. Paving, vitrified brick, Bedford, Ind. ..... Aug. 17
Aug. 22. Roads, Upper Marlboro, Md. ..... Aug. 17
Aug. 22. Paving, etc., Alliance, O. ..... Aug. 3
Aug. 23. Roadwork, Madisonville, O. ..... Aug. 10
Aug. 23. Curbing, Ottawa, Kan. ..... Aug. 17
Aug. 28. Macadam roads, Detroit, Mich. ..... Aug. 17
Aug. 28. Wagon road, Kooskia, Idaho ..... Aug. 10
Aug. 28. Road, Bowling Green, O. ..... Aug. 3
Aug. 28. Asphalt plant, New Orleans, La. ..... July 27
Advertised, Eng. News, July 27 to Aug. 30.
Aug. 29. Paving, Portsmouth, O. ..... Aug. 10
Aug. 29. Macadam road, Wilmington, Del. ..... Aug. 17
Advertised, Eng. News, Aug. 17 and 24.
Aug. 29. Paving, Portsmouth, O. ..... Aug. 17
Advertised, Eng. News, Aug. 17 and 24.
Aug. 29. Paving, Portsmouth, O. ..... Aug. 17
Aug. 29. Grading, Cleveland Heights, O. ..... Aug. 17
Aug. 30. Asphalt paving, Madison, Wis. ..... Aug. 10
Sept. 1. Roads and trails, Wallace, Idaho ..... Aug. 10
Sept. 1. Macadam roadway, Fort Hancock, N. J. ..... Aug. 10
Sept. 1. Paving, Elizabeth, N. J. ..... Aug. 17
Sept. 11. Macadamizing, Janesville, Wis. ..... Aug. 17
No date. Paving, Chicago, Ill. ..... Aug. 17
Advertised, Eng. News, Aug. 17.

MISCELLANEOUS CONTRACTS.

Aug. 17. Light-house, Buffalo, N. Y. ..... July 20
Advertised, Eng. News, July 20 to Aug. 17.
Aug. 17. Dike, Los Angeles, Cal. ..... June 22
Advertised, Eng. News, June 22 to Aug. 3.
Aug. 17. Broken stone, etc., New York, N. Y. ..... Aug. 10
Aug. 18. Dredging, Newport, R. I. ..... July 20
Advertised, Eng. News, July 20 to Aug. 17.
Aug. 18. Inlet wall, San Francisco, Cal. ..... July 20
Advertised, Eng. News, July 20 to Aug. 17.
Aug. 19. Dredges, Washington, D. C. ..... July 20
Advertised, Eng. News, July 20 to Aug. 24.
Aug. 19. Dredging, Seattle, Wash. ..... Aug. 3
Aug. 21. Steel bars, Glendive, Mont. ..... July 13
Advertised, Eng. News, July 13 to Aug. 3.
Aug. 21. Dredging, Wilmington, Del. ..... July 27
Advertised, Eng. News, July 27 to Aug. 24.
Aug. 21. Traveling crane, Washington, D. C. ..... July 27
Advertised, Eng. News, July 27 and Aug. 3.
Aug. 21. Drain, Berea, O. ..... Aug. 10
Aug. 21. Fire alarm telegraph, New York, N. Y. ..... Aug. 17
Aug. 22. Machinery, Washington, D. C. ..... July 27
Aug. 23. Street cleaning, Philadelphia, Pa. ..... Aug. 17
Aug. 24. Retaining wall, Mount Holly, N. J. ..... Aug. 17
Aug. 24. Sea wall, Boston, Mass. ..... Aug. 17
Aug. 24. Dredging, Boston, Mass. ..... Aug. 17
Aug. 25. Concrete dam, Greenwich, Conn. ..... Aug. 17
Advertised, Eng. News, Aug. 17.
Aug. 24. Breakwater, Boston, Mass. ..... Aug. 10
Advertised, Eng. News, Aug. 10.
Aug. 25. Laundry machines, pipe, etc., Wash., D. C. ..... July 27
Aug. 26. Coaling plant, Philippines ..... May 4
Aug. 26. Dredging, New London, Conn. ..... Aug. 3
Advertised, Eng. News, Aug. 3 to Aug. 31.
Aug. 26. Scale, Portsmouth, N. H. ..... Aug. 10
Aug. 27. Filling and grading, Key West, Fla. ..... July 20
Aug. 28. Canal, Montrose, Colo. ..... July 13
Advertised, Eng. News, July 13 to Aug. 3.
Aug. 28. Sanitary fixtures, Washington, D. C. ..... Aug. 3
Advertised, Eng. News, Aug. 3 to Aug. 31.
Aug. 29. Wharf repairs, Portland, Ore. ..... Aug. 17
Aug. 29. Bonds, Marksville, La. ..... July 27
Advertised, Eng. News, July 27.
Aug. 29. Forges, etc., Washington, D. C. ..... July 27
Aug. 30. Breakwater extension, Newport, R. I. ..... Aug. 30
Advertised, Eng. News, Aug. 3 to Aug. 31.
Aug. 31. Dredging, Portland, Me. ..... Aug. 5
Advertised, Eng. News, Aug. 3 to Aug. 31.
Aug. 31. Lock and dam, Nashville, Tenn. ..... Aug. 5
Advertised, Eng. News, Aug. 3 to Aug. 31.
Sept. 1. Steel manufacture, New South Wales. ..... Mar. 23
Advertised, Eng. News, Mar. 30 to June 29
Sept. 1. Bonds, Houston, Miss. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to 31.
Sept. 1. Dredging, Columbus, O. ..... Aug. 17
Sept. 1. Garbage disposal, Chicago, Ill. ..... Aug. 17
Sept. 2. Cement, Austria ..... Aug. 17
Sept. 2. Chimney, Erie, Pa. ..... Aug. 17
Sept. 5. Cement, Billings, Mont. ..... Aug. 17
Advertised, Eng. News, Aug. 17 to Sept. 7.
Sept. 5. Dredging, Mobile, Ala. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to Sept. 7.
Sept. 5. Dredging, San Francisco, Cal. ..... Aug. 10
Sept. 5. Drainage work, Miami, Fla. ..... Aug. 10
Advertised, Eng. News, Aug. 10.
Sept. 5. Dam, Billings, Mont. ..... July 13
Advertised, Eng. News, July 13 to Aug. 3.
Sept. 6. Tunnel, Billings, Mont. ..... July 13
Advertised, Eng. News, July 13 to Aug. 3.
Sept. 6. Breakwater extension, Grand Rapids, Mich. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to Sept. 7.
Sept. 7. Dredging, New York, N. Y. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to Sept. 7.
Sept. 7. Laundry (Mfg. Plants), Toledo, O. ..... Aug. 17
Sept. 8. Dredging pumps, etc., St. Louis, Mo. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to Sept. 7.
Sept. 9. Derrick, Washington, D. C. ..... Aug. 10
Sept. 9. Concrete work, Florida East Coast Ry. ..... July 27
Advertised, Eng. News, July 27 and Aug. 31.
Sept. 9. Dredging, Charleston, S. C. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to Aug. 31.
Sept. 9. Pier, Boston, Mass. ..... Aug. 17
Sept. 10. Fence, Fort Wadsworth, N. Y. ..... Aug. 17
Sept. 12. Dredging, New York, N. Y. ..... Aug. 17
Advertised, Eng. News, Aug. 17 to Sept. 14.
Sept. 12. Machine tools, Washington, D. C. ..... Aug. 10
Sept. 12. Crane, Washington, D. C. ..... Aug. 10
Sept. 13. Lathe, machine tools, etc., Wash., D. C. ..... Aug. 17
Sept. 14. Light-house, Tompkinsville, N. Y. ..... Aug. 10
Advertised, Eng. News, Aug. 10 and 17.
Sept. 15. Canal excavation, Chattanooga, Tenn. ..... Aug. 17
Advertised, Eng. News, Aug. 17 to Sept. 14.
Sept. 16. Hoist, Washington, D. C. ..... Aug. 10
Sept. 26. Tunnel, Montrose, Colo. ..... Aug. 10
Advertised, Eng. News, Aug. 10 to Sept. 21.
Oct. 10. Harbor works, Egypt ..... Aug. 17
Nov. 1. Railroads, Philippines ..... June 15
Nov. 9. Wharf, etc., Havana, Cuba ..... July 27
Jan. 1. Statue, Indianapolis, Ind. ..... July 20
Advertised, Eng. News, July 20.
No date. Inclines, etc., Shreveport, La. ..... July 27
Advertised, Eng. News, July 27.

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

BONNERVILLE SOUTHWESTERN.—We are advised that surveys are made and right-of-way obtained for this railway. Notice of its incorporation appeared in Engineering News on May 18. The line will be 65 miles long. Capital is secured. Contract for construction of the railway has been let to the FRISCO CONSTRUCTION CO. The line is partly built. It will extend from Bonnerville (Bono post-office), Ark., to Jelks, Ark. A. J. Davidson, at St. Louis, Mo., is Pres.

CINCINNATI, BURNSIDE & CUMBERLAND RIVER.—Company has been incorporated in Kentucky, with $250,000 capital, to build a line four miles long from Burnside Junction, on the Cincinnati Southern Railway, via Burnside Landing, to Tateville. The incorporators are C. W. Cole, A. Telford and J. W Hood, of Cincinnati; M. F. Molloy, of Carthage, O.; Murray B. Hubbard, of Covington; and C. B. Forse, of Newport, Ky.

CHICAGO & NORTHWESTERN. — This company has filed amended articles of incorporation in Wyoming, in which the capital stock is increased from $7,500,000 to $13,500,000. This increase in capital stock was made in the name of the Wyoming Central Railway, under which name the C. & N.-W.'s extension from Casper to Lander is being built. It is reported that, owing to the changed plans, the Northwestern now contemplates the extension of the Casper-Lander line on across Wyoming into Idaho, and thence to Salt Lake City, and possibly to the Pacific coast. E. C. Carter is Ch. Engr., at Chicago.

EDMUNDS & EASTERN.—We are informed that three routes have been surveyed, and one selected, for the company's proposed 36-mile line. Right-of-way is secured, and capital partly obtained. Contract probably will be let this month. F. M. Stanley is Secy. and Treas., 419 Alaska Bldg., Seattle, Wash. George B. Cole is Pres., Mutual Life Bldg., Seattle. The line will extend from Edmunds, via Maltby, to Monroe, Wash.

FOURCHE RIVER VALLEY & INDIAN TERRITORY R. R.—It is reported that right-of-way has been secured for the proposed railway from Fourche to Jennings, La., about 40 miles. It will be built by the Fourche Lumber Co.

HOUSTON, BEAUMONT & RED RIVER.—P. R. TURNEY, of Houston, Tex., has been awarded contract for building first 40 miles of the railway from Houston to North Dayton, via Perryman, Batson, Saratoga, Kountze, Jasper and on to Leesville and Alexandria, La. Edward Kennedy, of Houston, is the promoter of the company. The line will cross the Sabine River.

INTERCOLONIAL.—During 1905 and 1906 it is expected to double-track the line between Moncton, N. B., and Painsec Junction, 6.87 miles; and from Hadlow to Chaudiere Curve, 5.8 miles. The terminal facilities at Halifax, N. S., are being increased at an expenditure of $200,000, and the work will probably be completed next year. W. B. McKenzie, Moncton, N. B., is Ch. Engr.

LAKE SHORE & MICHIGAN SOUTHERN.—We are informed that the FERGUSON CONTRACTING CO., 69 Wall St., New York City, has been awarded contract for 34 miles of grading and masonry between Franklin, Pa., and Brookville. Work involves about 3,500,000 yds. masonry, one 950-ft. tunnel. Work is heavy. Cost, about $2,000,000. THOMAS McNALLY CO., of Pittsburg, has the contract for masonry work on bridge over the Allegheny River. THE MILLER CONSTRUCTION CO., of Lock Haven, Pa., has contract for grading and masonry work for 20 miles.

MIDLAND STEEL CO.—THE CHARLES A. SIMS CONSTRUCTION CO., of Philadelphia, Pa., has contract for constructing a branch line for the Midland Steel Co., of Cleveland, to connect its plant at Neal Station with the Cleveland & Pittsburg Ry.

MISSOURI, ARKANSAS & SOUTHWESTERN.—We are informed that greater part of right-of-way has been donated and surveys completed for this railway. Part of capital is secured. BODKIN & MOORE, of Memphis, Tenn., have 10-mile contract. The line will extend from Batesville, Ark., to Cave City, Jessup, Calamine, Cloverbend and Hoxie, 50 miles. R. W. Earnheart is Pres., and B. I. Brookfield, Ch. Engr., at Batesville, Ark.

MORGANFIELD & ATLANTA.—THE MISSOURI CONSTRUCTION CO. has been awarded contract for building roadbed for this railway. Work is to be completed by Feb. 1, 1906.

NORTHERN PACIFIC.—It is announced that an extension will be built from Detroit, Minn., to Bemidji. T. E. Abbott, C. E., of Minneapolis, Minn., is said to be running the survey. This new line would be 68 miles long.

PENNSYLVANIA R. R. (LINES WEST OF PITTSBURG).—Contract for building an elevated road through Newburgh, a suburb of Cleveland, was awarded to the WILLIAMS BROS. & MORSE COMPANY, of Cleveland, O. The elevated portion will cross five streets, and will require the excavation of 194,000 cu. yds. of earth and the building of 10,000 yds. of masonry.

SOUTHSIDE COAL & RY. CO.—We are advised that this company will commence construction of its line about October 1. The road will run from Paris, Ark., to Dardanelle, Ark., a distance of 38 miles; with two branches of 12 miles, making a total of 50 miles. The roadbed will be rock ballasted, and laid with 85-lb. steel; bridges will be of steel. Company will be in the market for 500 new coal cars, three 85-ton freight locomotives, four passenger cars, three cabooses, 50 box cars. Geo. D. Locke is Vice-Pres., Missouri Trust Bldg., St. Louis, Mo. Noted on Aug. 3.

SEABOARD AIR LINE.—Company will spend about $150,000 in improvements on its terminal at Savannah, Ga. W. W. Gwathmey, Jr., is Ch. Engr., at Portsmouth, Va.

VANCOUVER, VICTORIA & EASTERN.—P. WELCH, of Spokane, Wash., has been awarded contract for building 14 miles of railway westward from Midway, B. C. This line will be continued on to Oroville, Wash.

WESTERN PACIFIC.—Contract for building this road, according to Kansas City report, has been awarded to the WILLIAM KENNEFICK CONSTRUCTION CO., of Kansas City, Mo.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

HARTFORD, CONN.—At the recent session of the legislature franchises were granted to several new trolley corporations. The Shore Line Electric Railway Co., having a maximum capitalization of $1,000,000, was organized to build a street railway along the Long Island coast from Stony Creek to Old Saybrook. The Norwich, Jewett City & Voluntown Street Railway Co. was incorporated and granted charter rights to build a trolley in the various towns in New London and Windham Counties. It has a capital stock of $700,000. The New Canaan Street Railway Co., capitalized at $500,000, was given a charter to build from Norfolk to New Canaan. The Lebanon Street Railway Co. received a franchise to run a line through the towns of Columbia, Lebanon, Franklin, Bozrah and Norwich. The incorporators are: William Wardwell, John E. Bliss, Charles B. Keeler, Frederick A. Palmer, Junius Benedict, C. N. Scoville, J. F. Silliman and T Roberts, all of New Canaan; and Yester Hyatt, Frank H. Merrill, Reed G. Haviland and W. F. Acton, all of Norwalk, Conn. Company has a capitalization of $200,000. Among the other new incorporations are the Willimantic & Stafford Street Railway Co.; the Thomaston Tramway Co.; the Damascus Railway Co., and the Hartford & Middletown Street Railway Co. Various companies were authorized to build additional lines. Among such corporations were the Bristol & Plainville Tramway Co.; the Hartford, Manchester & Rockville Tramway Co.; the Willimantic Traction Co.; the Rockville, Broad Brook & East Windsor Street Railway Co.; the New London & East Lyme Street Railway Co.; the Stafford Springs Street Railway Co.; the Stamford Street Railway Co.; the East Haven & Morris Cove Street Ry. Co., and the Meriden, Southington & Compounce Tramway Co. The life of the unused charter rights of the following companies was extended until July 1, 1907: The Norwalk, Bridgeport & Bristol Traction Co.; the Cheshire Street Ry. Co.; the Canaan & Berkshire Tramway Co.; the Suffield Street Ry. Co.; the Hartford & Springfield Street Ry. Co.; the Hartford & Torrington Tramway Co.; the Thomaston & Watertown Electric Ry. Co.; the Farmington Street Ry. Co.; the Bloomfield, East Granby & Tariffville Tramway Co.; the Watertown & Litchfield Tramway Co.; the New Milford & Lake Waramaug Tramway Co.; the Greenwich Tramway Co.; and the Meriden, Southington & Compounce Tramway Co.

HARTFORD, CONN.—The HUB CONSTRUCTION CO., of Boston, Mass., is reported by the Hartford "Courant" to have been awarded contract for building the Rockville, Broad Brook & East Windsor Street Ry. An earlier newspaper report stated that the National Construction & Bldg. Co. had this contract, as noted in Engineering News on Aug. 3.

WATERBURY, CONN.—The Connecticut Ry. & Lighting Co. is reported to have prepared plans for an extension of its line to Watertown and Thomaston. J. E. Sewell, Waterbury, is Gen. Mgr.

ROCHESTER, N. Y.—The Rochester & Eastern Rapid Railway an interurban trolley line, 48 miles long, extending from Geneva to Rochester, via Canandaigua, has been purchased by the Andrews-Vanderbilt Co. The new officers elected are: Horace E. Andrews, of Syracuse, Pres.; William K. Vanderbilt, Jr., of New York, vice-Pres.; Walter N. Kernan, Utica, Secy.; George B. Rogers, Buffalo, Treas.; John H. Pardee, Canandaigua, Gen. Mgr. Extensions are planned.

ITHACA, N. Y.—C. L. Crandall, J. L. Marshall and Jared T. Newman, of Ithaca, are promoting an electric line between this city and Elmira. Preliminary survey is made.

ELIZABETH, N J.—COLE & TENSON, of Plainfield, N. J., have been awarded contract for grading and building New Jersey Short line from Milltown to Elizabeth.

SCRANTON, PA.—Charter has been applied for by the Scranton & West Side Street Ry. Co. The incorporators are Col. Ezra H. Ripple, Dr. A. J. Connell, F. W. Ogden, Thomas Richards, W. D. Parry, W. L. Connell and Deputy Attorney General Frederick W. Fleitz. The company plans to build a line from Mifflin Ave. and Center St, crossing the Linden St. bridge to the West Side and through a number of streets of West Scranton to the Lackawanna Township line. The incorporators of this company are also incorporators of the Northern Electric Co., which will build an electric road from Scranton to Factoryville.

BUTLER, PA.—We are informed that THE FERGUSON CONTRACTING CO., 69 Wall St., New York, has been awarded contract to build the Pittsburg & Butler St. Ry. line between Etna and Butler. Cost, about $500,000.

PITTSBURG, PA.—The Pittsburg Railways Co. has acquired the charter rights and franchises of the Beaver Valley Traction Co. The intention of the Pittsburg Railways Co. is to extend its West End Line to connect with the Beaver Valley line. Gaylord Thompson, at Beaver, is Gen. Mgr. of the Beaver Valley line.

HAGERSTOWN, MD.—The Hagerstown Ry. Co. will build a 10-mile extension, it is announced. W. C. Hepperle is Supt., at Hagerstown.

FALLS CHURCH, VA.—Regarding the Washington & Virginia Transit Co., noted in Engineering News on July 27, W. C. Pennwitt, vice-Pres., at Glencarlyn, Va., states that construction may be begun this fall. Preliminary work is under way.

NEWELL, W. VA.—The Newell Street Ry. Co. has been incorporated. Company will construct and operate an electric railway in this city. Capital, $10,000. The Newell Water & Power Co., of Newell, with a capital of $10,000, has been chartered to construct and operate water-works and plants for generating and distributing electricity. Incorporators of both companies are: J. G. Lee, H. N. Parker, E. M. Knowles, W. E. Wells and W. B. Hill, all of East Liverpool.

NEW ORLEANS, LA.—The New Orleans Railway & Light Co. has approved and ratified the contract made by the old company with Sanderson & Porter, Contracting Engineers, for extensive improvements which will be carried out as proposed. Cost will be about $1,600,000, of which $450,000 already has been expended. Elwyn C. Forster is Pres. and Jacob H. De Grange, vice-Pres. and Secy.

MAYFIELD, KY.—We are advised that work will commence on line of the Cairo & Tennessee River Ry. Co., at Wickliffe, Ky., in about 30 days. The line is located between Wickliffe and Mayfield. Contracts will be let to local contractors in five-mile sections. L. W. Goode, 111 Broadway, New York, is Pres.; C. H. De Lono is Gen. Mgr., and Hood Tucker is Ch. Engr., at Wickliffe. Noted fully on July 13.

NASHVILLE, TENN.—According to prospectus issued by the Nashville Interurban Ry. Co., it is planned by this company to build a railway from Nashville to Franklin, Columbia and Mount Pleasant. Gasoline motor cars will be used. E. B. Stahlman, of Nashville, is Pres.

LIMA, O.—THE E. L. MYERS CO., of Chicago, has been awarded contract for grading and for concrete bridge work on the Toledo & Lima Traction Co.'s line.

PORTSMOUTH, O.—The Portsmouth Street R. R. & Light Co. will build an extension to suburb. L. D. York is Pres. and Raymond York, Gen. Mgr., at Portsmouth.

HAMMOND, IND.—We are informed that permanent survey has been begun for the North Central Ry. Co. Lee Gower, Lombard Bldg., Indianapolis, is Pres. Noted on July 27.

ESCANABA, MICH.—Surveys are being run for the recently-incorporated Menominee & Escanaba Ry Co. The line will connect Stephenson, Daggett, Nadeau, Spaulding, Harris, Bark River and Hyde. Capital is $300,000. Construction will be started probably next spring.

CHICAGO, ILL.—Clayton E. Crafts, an incorporator of the Illinois & Wisconsin Ry. Co., has stated that right-of-way is all secured for line from Chicago to McHenry and that it is planned to start construction in fall. The line will be about 45 miles long. Capital is $10,000. The other incorporators are George M. Stevens, Henry Lutzen Kirchen, George W. Bryson and H. K. Crafts, all of Chicago.

IMBODEN, ARK.—A company which will build an electric railway from Imboden to Wayland Springs and Smithville has been incorporated by J. L. McKamey, M. H. Long and W. C. Norment.

TECUMSEH, OKLA.—We are advised that surveys are nearly completed for the Oklahoma Electric R. R. Co., which will build a 5-mile line between this city and Shawnee. Alfred Hare, of Tecumseh, is Pres. Capital is secured. Date for letting contracts is not decided. Noted on July 27.

NORTH YAKIMA, WASH.—George Donald, Pres. of the Yakima National Bank; William H. Carsen and H. S. Rand, of Burlington, Ia., have organized the North Yakima & Valley Ry. Co. Capital is $1,000,000. The company will build an electric railway system in Yakima valley. Surveys are now under way. Jesse H. Rose is interested.

PORTLAND, ORE.—Dr. Henry Waldo Coe and associates are interested in a plan to build, approximately, 200 miles of electric railways. The projected road starts from Portland, proceeds to Vancouver, crossing the Columbia River via Woodlawn, follows the north bank of the Columbia River to Ridgefield, Woodland, Caples, Kalama, Kelso, Ladu, to Stella, thence to Castle Rock, Silver Lake and the St. Helens mining district in Washington, with a branch through to the Morton coal fields, and a line through the mining district which shall cover all of the important mineral deposits of that section, thence in a southerly direction toward the mineral section north of Washougal, down to the Columbia River, and through Washougal, Camas, Fishers and Vancouver, back to Portland. The estimated cost of construction and operation of this railway system, according to Dr. Coe, will be $4,000,000. George W. Lilly, of Portland, is Engr.

BOISE, IDAHO.—John McMillan is reported to be interested in scheme to build an electric railway between Caldwell and Boise, at estimated cost of $100,000.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

SPRINGFIELD, MASS.—GEORGE H. McCLEAN, of Springfield, has been awarded contract for installing central heating plant for Springfield Hospital. Kirkham & Parlett, Carr Bldg., are Archs.

LESTERSHIRE, N. Y.—Contract has been let to the BINGHAMTON LIGHT, HEAT & POWER CO., of Binghamton, for lighting village streets for five years.

NEW YORK, N. Y.—Bids are asked by Police Department until 2 p. m., Aug. 18, for erecting and installing new steam boiler and heating system complete at various station houses. William McAdoo, Comr.

PHILADELPHIA, PA.—...tised to be received until ... ing electric arc lights ... Potter is Director of ...

COLUMBIA, PA.—C. ... Bldg., is preparing ... power plant for the ... & Power Co., of which ... Supt.

WESTCHESTER, PA.—... FERIS, of Westchester, ... power plant and for other ... mal school. Baker & ... St., Philadelphia, are Archs.

BALTIMORE, MD.—The ... Co. has been awarded ... city gas lamps.

STEVENSON, MD.—... Clay St., Baltimore, have ... tract for erection of a power ... Brown, at Green Spring ... Schwab, Calvert Bldg., Balt...

GATE CITY, VA.—We ... bids will be received at ... plant to be erected on Copper ... Taylor and others.

WINCHESTER, VA.—The ... Washington City Electric ... Winchester, Va., has let contract ... CELL & CO., of Harrisonburg, ... 322, for building proposed dam ... and raceway along the ... near Millville, W. Va. This was ... tised and fully noted in ... on June 29.

ELM GROVE, W. VA.—The ... Elm Grove R. R. Co. may ... plant at Elm Grove. I. P. ... at power plant.

BENWOOD, W. VA.—A ... posed of W. C. Handlan, ... Frasher, Gen. Mgr., and William H. Snyder, Secy. of the Ohio Valley Electric Light & Power Co., has under consideration plans for improving the plant of this company.

ANDERSON, S. C.—The ... Power Co. has been incorporated with capital stock of $150,000, to develop water power and build an electric plant at ... 16 miles west of Anderson. It is estimated that 6,000 HP. can be developed. ... T. Smythe, of Charleston, S. C.; H. D. Lieng and Fred G. Brown, of Anderson, are the incorporators. Company will begin construction, it is reported, when it is granted a charter.

CALHOUN, GA.—George C. ... will build an electric plant, it is reported, at cost of $4,000.

DUBLIN, GA.—Municipal water-works and electric light plant will be improved. V. L. Stanley is Mgr. and Supt.

MONROE, GA.—Contract has been awarded to the ELECTRIC SUPPLY CO., of Savannah, for machinery and material and installing complete an electric light plant. The proposed plant embraces two 66 ... 18-in. high pressure boilers; one 175 HP. Corliss engine; one 120 KW. A. C. generator; 15 miles and 50 c. p. street lights; 900 light transformer, capacity and pole lines. J. B. McCrary, Senoia, Ga., is Engr. Advertised in Engineering News on July 13.

OPELIKA, ALA.—The plant of the Alabama Electric Light & Power Co. will be enlarged, it is reported. J. W. Person is Mgr.

LEETONIA, O.—We are informed that the Leetonia Electric Light & Power Co. will install a heating system, steam or hot water, to heat business places and dwellings. L. H. Thullen, Edgewood Park, Pa., is Mgr. and Secy.

COLUMBUS, O.—The Ohio Fuel Supply Co., of Columbus, may increase its capital to provide funds for building a pipe line from Columbus into suburbs of Cincinnati. The line proposed would terminate at present at Norwood, a distance from Columbus of 110 miles. George W. Crawford is Pres.

READING, O.—Geo. Hornung, Consult. Engr., Johnson Bldg., Cincinnati, O., has been engaged to design an entirely new electric light plant for Reading, Ohio, to replace the present municipal plant. New boilers, engines, generators, street lamps and line work will be required. B. A. Burns is Supt. of plant.

HAMILTON, O.—B. S. Hughs will prepare plans for the Champion Coated Paper Co. for a power plant, with capacity of 9,000 HP. It will cost $150,000. Company may build another paper mill at Hamilton of the same capacity as its present one, which would cost $500,000.

TOLEDO, O.—Estimates prepared by Frank Consaul, Ch. Engr. Bd. Public Service, for installing a municipal lighting plant place the cost at $470,404. Previously noted.

CLEVELAND, O.—GRIESE & WALKER, Prospect St., have contract for building a power house on Davenport St. for the Gund Brewing Co. Cost, about $20,000.

FORT BRANCH, IND.—Improvements at power plant of the Evansville & Princeton Traction Co. are being made. W. P. Larcey is Gen. Mgr.

INDIANAPOLIS, IND.—The Laycock Power House Co. has been incorporated here by the T. B. Laycock Mfg. Co. Group of manufacturing buildings will be built in central part of the city. Large power plant will be installed to furnish power for operation of machinery and for supplying heat and lights.

STOUGHTON, WIS.—We are informed that bids received on August 12 for electrical apparatus and equipment, as advertised in Engineering News on August 3, were rejected. New bids will be received on August 26, 2.30 p. m., for the following contracts: A, powerhouse; B, one 130-HP. water tubular boiler; C, one 100-KW. steam turbine; D1, generator and exciters; D2, electrical apparatus; E, water wheel governor; F, condenser, heater and feed pump. W. G. Kirchhofer, Madison, Wis., is Engr. Plant will have capacity of 51 2,000 c. p. arc lights. Estimated cost, $13,000.

KEWANEE, ILL.—The Kewanee Light & Power Co. was granted franchise recently by the Wethersfield village board to extend its mains and electric lighting system into Wethersfield. Ben C. Parkinson is Secy. of Company.

CHICAGO, ILL.—The Commonwealth Electric Co. has awarded contract to JACOB ROTZ, 219 La Salle St., for the enlargement of its Hyde Park plant. Shepley, Rutan & Coolidge, 604 Colony Bldg., are Archs. The cost, including equipment, will be about $150,000. E. C. P. Holmes is Pur. Agt. for company.

MILWAUKEE, WIS.—Council has approved the Central Heating Co.'s ordinance. Company probably will erect heating plant. Bingley R. Fales is company's representative.

WATERLOO, IA.—The Waterloo, Cedar Falls & Northern Ry. Co. will enlarge its plant if an extension of its railway is built to Westfield. M. L. Newton is Ch. Engr., at Waterloo.

ST. PAUL, MINN.—The St. Paul Gas Light Co. will erect a 1-story power house. J. W. Stevens, New York Life Bldg., is Arch.

FORT CROOK, NEB.—THE BERGGRIN ELECTRIC CO., of St. Paul, Minn., has the contract for installing electric light system at Fort Crook, at $21,279. A contract has also been awarded to the GENERAL ELECTRIC CO. for electrical work, at $3,260.

BELLE FOURCHE, S. D.—The franchise for an electric light plant in Belle Fourche has been let to the Belle Fourche Power & Water Co., which is controlled by A. A. Moodie, Pres.; A. H. Marble, vice-Pres.; F. E. Bennett, Secy. and Treas., and J. S. Moodie, Gen. Mgr. Work will begin at once.

LARAMIE, WYO.—W. E. Stearne, of Denver, Colo., Secy. of the Arapahoe Electric Light & Power Co. at Littleton, has organized a company to furnish light to the town of Laramie. Alfred E. Kaiter, of Indianapolis, is interested.

SHERIDAN, WYO.—The contract for the installation of an electric light system at Fort Mackenzie, Wyo., has been awarded to the BERGGRIN ELECTRIC CO., of St. Paul, Minn., at $10,801.

COLUMBIA, MO.—City has voted to issue $10,000 of bonds for improving city water and light plant. D. Podrick is Supt. and Ch. Engr.

KANSAS CITY, MO.—Bernard Corrigan, Pres. of Kansas City Electric Light Co., has stated that work of building a plant to distribute heat and light for office buildings would be started in a few weeks if ordinance is signed by the Mayor. A franchise for this project was granted B. Corrigan, C. N. Black and R. E. Richardson by the city council recently.

LOWELL, MO.—The Spring River Power Co., of Joplin, Mo., will let contract for a construction of a 4,000 HP. steam plant to be operated in connection with the recently installed plant at Lowell. Jarnot Brown is Pres., at Miners Bank Bldg., Joplin.

DAVIS, IND. T.—J. L. Ellis, of Oklahoma City, and S. A. Hobson are said to contemplate establishing an electric light and power plant here.

MOUNDS, IND. T.—John Smith and associate, of Independence, Kan., has been granted a 20-year franchise for gas plant.

MEXIA, TEX.—The plant of the Mexia Water-Works & Electric Light Co. has been acquired by the McQuatters Machine & Plumbing Co., of Hillsboro, Tex. It is planned to enlarge the plant at cost of about $75,000.

JARILLA, N. MEX.—The Southwest Smelting & Refining Co., of Jarilla, will build a large electric power plant.

WHATCOM, WASH.—The Bellingham Bay Improvement Co. has been granted a one-year's extension of time on its Nooksack power plant franchise whereby the time for the completion of the plant is fixed at October, 1906, instead of Oct., 1905. $120,000 has been expended already. There remains over $150,000 to be spent in completing the work. J. J. Donovan is Gen. Mgr., at Bellingham, Wash.

SAN LUIS OBISPO, CAL.—The plant of the San Luis Obispo Gas & Electric Co. will be enlarged. B. F. Thomas is Mgr.

MARYSVILLE, CAL.—The Marysville & Nevada Power and Water Co. has changed its principal place of business from Smartville to Marysville. W. W. Waggoner, of Nevada City, has been elected Pres.; W. F. Engelbright and James O'Brien vice-Presidents; John E. Ebert, Secy.; James K. O'Brien, Treas.; James O'Brien, Supt.; W. W. Waggoner, Ch. Engr.; W. F. Engelbright, Consult. Engr. The company is preparing to construct a dam across the Yuba River at the Narrows near Smartville.

SALT LAKE CITY, UTAH.—The County Commissioners have granted to Emil J. Raddatz a franchise to construct, maintain and operate an electric transmission system. The franchise is for a period of 50 years and the grantee agrees to commence work before September 1, 1905, and complete one line to Bingham Junction and Sandy City by January 1, 1906.

VICTORIA, B. C.—City has voted to borrow $11,000 for purpose of increasing capacity of electric light plant. Noted on July 27.

VERNON, B. C.—The Okaragon Land Co., it is reported, is preparing to develop water power at Shuswap Falls for electric light and power purposes and for operating an electric railway. $150,000 of stock is subscribed.

BRANTFORD, ONT.—The Western Counties Electric Co. has been incorporated, with a capital of $500,000, to develop water power for the production of electric, pneumatic and hydraulic power, etc. The directors are: S. F. McKinnon, J. N. Shenstone and Chas. G. Harstone, of Toronto.

TORONTO, ONT.—The Toronto & Niagara Power Co. (controlled by the Electrical Development Co.) will extend its power lines to London, Brantwood, Galt, Berlin, Preston, Woodstock, Paris, Ingersoll, Hespeler, Guelph, Waterloo and other cities. Fred. Nicholls, 14 King St., East Toronto, is Mgr. and vice-Pres.

NIAGARA FALLS, ONT.—The Ontario Transmission Co. has been incorporated, with a capital of $1,000,000, to develop water powers for electricity. The directors are: J. S. Lovell, W. Bain and E. W. McNeill, of Toronto.

PICTON, ONT.—Glenora Power Co., of this city, is reported incorporated, with $100,000 capital.

CALGARY, N. W. T.—THE ALLIS-CHALMERS-BULLOCK CO., of Montreal, Que., has been awarded contract for electric light plant for this city.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

DAMARISCOTTA, ME.—The towns of Damariscotta and Newcastle each held a town meeting Aug. 5 and instructed their selectmen to contract for and to have built a steel or concrete bridge over the Damariscotta River between the two towns to replace old structure. Cost, about $15,000. Previously mentioned.

BOSTON, MASS.—Bids were received Aug. 7 by Metropolitan Park Commission, J. R. Rabkin, Engr., for building Boylston St. bridge and approaches, and masonry dam, Charles River Reservation, the contract being awarded to M. McDONOUGH, Swampscott, Mass., for $25,464. Itemized bid of successful contractor is given under Contract Prices.

BRIDGEPORT, CONN.—We are advised that Middlesex Construction Co., New Brunswick, N. J.; Bunting Constructing Co., New York; Abbot-Gambie Co., New York, and Standish Stone Corporation, Bridgeport, Conn., were low bidders Aug. 10 for building concrete bridge over Ash Creek, and that the contract will be awarded to one of the above firms. Bids were received by E. T. Buckingham, Cy. Clk., and are given under Contract Prices.

NEW HAVEN, CONN.—We are informed that the following bids were received Aug. 11 for constructing a cement bridge on Kimberly Ave., as advertised in Engineering News: Chas. W. Blakeslee & Sons, New Haven, $25,001; RUSSELL CONTRACTING CO., 156 Fifth Ave., New York, $20,902 (awarded contract); Stacy B. Opdyke, New York, $23,061; J. Fitzgerald Co., New London, Conn., $28,852.

NEW YORK, N. Y.—Following bids were received Aug. 10 by George E. Best, Comr. of Bridges, for furnishing the metal work for the anchorages and constructing the towers, cables, suspenders and suspended superstructure of the Manhattan bridge, over the East River, between the Boroughs of Manhattan and Brooklyn: Pennsylvania Steel Co., 71 Broadway, New York, $7,284,739; Jno. Peirce Co., 277 Broadway, New York, $7,486,491; ; R. H. Hood Co., 299 Broadway, New York, $7,956,712; Milliken Bros., 11 Broadway, New York, $7,983,970; King Bridge Co., 277 Broadway, New York, $9,312,940. For itemized bids see under Contract Prices.

MOUNT HOLLY, N. J.—Bids are asked by Board of Chosen Freeholders until 11 a. m., Aug. 24, for the erection of bridge near Florence, Burlington County. Plans and specifications may be seen at office of Chas. E. Merritt, County Solicitor, 21 High St., Mount Holly.

TITUSVILLE, PA.—Bids are asked by this city, W. M. Dame, Cy. Clk., until Aug. 21 for constructing three bridges. (Advertised, Engineering News.)

CLARKSDALE, MISS.—Following bids were received Aug. 7 by County Supervisors for construction of bridge over Sunflower River at Second St.; bridge is to consist of one span 160 ft. long on 48-in. tubes, 50 ft. long, two 20-ft. spans, a 210-ft. steel trestle approach, 16-ft. roadway and 4-ft. sidewalks, and about 5,000 cu. yds. earth filling: Bellefontaine Bridge Co., $12,698; Brackett Bridge Co., $11,900; American Bridge Co., $11,300; Southern Bridge Co., $12,070, and 22½ cts. for earthwork; W. T. Young Bridge Co., $10,968, 25 cts. for earthwork; Memphis Bridge Co., $11,800, 20 cts. for earthwork; Stupp Bros. Bridge Co., $11,700; MISSOURI BRIDGE & IRON CO., $9,950, 12½ cts. for earthwork (awarded contract); Joliet Bridge Co., $11,630, 25 cts. for earthwork. Alex M. Searlee, Engr., Vicksburg, Miss.

SPRINGFIELD, O.—The contract for constructing new bridge over Buck Creek at Water St. has been awarded by Board Public Service to the VARIETY BRIDGE & IRON CO., of Cleveland, for $10,760.

MARION, O.—The following bids were received Aug. 7 by County Commissioners for constructing a new steel bridge superstructure over Scioto River: J. C. Morris, Dayton, $10,480; Breckenridge Co., Cincinnati, $10,119; Climax Bridge Co., Marithon, N. Y., $10,300; Marion Welle, Ashley, $9,542; West Virginia Bridge Co., Wheeling, W. Va., $10,050; Huston & Cleveland, Columbus, $10,560 and $8,990; Oregon Bridge Co., Lebanon, $9,995; Mt. Vernon Bridge Co., $8,220 and $9,100; King Bridge Co., Cleveland, $8,700 and $10,500; Bellefontaine (O.) Bridge Co., $10,176; Western Reserve Const. Co., Cleveland, $6,374 and $5,443; Joliet Bridge Co., $10,340; Marion (O.) Bridge Works, 13 bids, ranging from $7,497 to $10,644.

EATON, O.—Sealed proposals will be received by O. A. Gale, County Audr., until 11 a. m., Aug. 26, for constructing a two-span, 150 ft. each, high truss steel bridge over Big Twin Creek on county line road, between Jackson Township, Montgomery County, and Lanier Township, Preble County.

PRINCETON, IND.—County Commissioners will soon advertise for bids for the construction of a 30-ft. iron and concrete bridge.

NEW CASTLE, IND.—Contracts for five bridges in Henry County have been let to the PAN-AMERICAN BRIDGE CO., of New Castle, by the County Commissioners.

GROSSE POINTE, MICH.—Bonds to the amount of $25,000 will be issued by Grosse Pointe Township to build two iron bridges over Connor's and Fox Creeks.

PEORIA, ILL.—We are informed that the City Council at its last meeting decided to invite competitive plans for a low level bridge across the Illinois River at Bridge St., to be 40 ft. in width, 6-ft. sidewalks, with either a bascule, trunnion or lift span. Total length of bridge about 11,000 ft., and to be either steel or reinforced concrete. C. M. Dolan, Cy. Engr.

ST. PAUL, MINN.—A proposed new railway, vehicle and foot bridge has been planned over the Mississippi River here near Fort Snelling. Cost, $250,000. This city will appropriate $150,000 of this sum and Congress will appropriate the balance.

KANSAS CITY, MO.—Bids are asked by Oscar Koehler, Rd. and Bridge Comr., until 11 a. m., Aug. 29, first, for constructing one 20-ft. steel bridge; second, one bid for all bridge abutments, culvert masonry, excavations and fills.

KANSAS CITY, MO.—Plans for a concrete bridge, to cost $40,000, to span 39th St., at Gilham Road, were presented to the Park Board and approved. The Metropolitan Street Ry. Co. will be asked to help defray the cost. E. A. Harper is Cy. Engr.

EAGLE PASS, TEX.—Fire destroyed the high wooden trestle, about 900 ft. long, connecting with steel spans of the International Railroad bridge on American side of Rio Grande. J. D. Trammel is Ch. Engr., Palestine, Tex.

DALLAS, TEX.—We are informed that the TEXAS BRIDGE CO., of Dallas, has been awarded contract by County Commissioners for constructing six steel bridges at a total bid of $5,307. F. Uhl, Engr.

BOULDER, COLO.—Contract for new 12th St. steel bridge across Boulder Creek was awarded Aug. 3 to the SHBELY BRIDGE Co., of Denver, for $4,425.

ABERDEEN, WASH.—It has been decided to replace the wooden bridge crossing the Wishkah River, from North to East Aberdeen, with a steel structure, to cost $30,000.

ALBANY, ORE.—The County Courts of Marion and Linn Counties have decided in joint session to rebuild bridge spanning the Santiam River at Mill City.

FREDERICTON, N. B.—A. R. Wetmore, Prov. Engr., Fredericton, informs us that masonry substructure of Fredericton Highway Bridge is at present only open for tenders; bids on the superstructure will be called for as soon as work for same can be completed.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

BURLINGTON, VT.—Bids are asked at office of James Knox Taylor, Supervising Arch., Washington, D. C., until 3 p. m., Aug. 31, for low-pressure steam heating apparatus, complete in place, for U. S. post-office and custom-house in this city. (Advertised, Engineering News.)

HARTFORD, CONN.—Plans are nearing completion for new office building for the Travelers' Insurance Co. Brick and stone, fireproof, eight stories, 144 × 200 ft. Donn Barber is Arch., 24 East 23d St., New York.

OSWEGO, N. Y.—It is rumored that the D., L. & W. R. R. Co. is to build a new freight-house here. Lincoln Bush is Ch. Engr., Hoboken, N. J.

NEW YORK, N. Y.—Plans are nearing completion for the new terminal for the New York Central & Hudson River R. R. Co., to be erected at 42d to 45th Sts., between Madison and Lexington Aves. Warren & Wetmore, 3 East 33d St., associated with Reed & Stein, 7 East 42d St., are the Archs. R. P. Bolton, 35 Nassau St., is Consulting Engr. in charge of heating, sanitary work and power equipment. Brick, stone, steel and copper, fireproof, 7 stories. Further details will be available about Sept. 1, when figures will be taken. Cost, $17,000,000.

V. J. Hedden & Sons Co., 1 Madison Ave., is taking figures and preparing to start on work for addition to Metropolitan Life Insurance Building, to be erected at Fourth Ave. and 24th St. H. Le Brun & Sons, 1 Madison Ave., are Archs.; A. R. Wolff, 130 Fulton St., is Steam Engr., and C. O. Mailloux, 76 William St., is Elec. Engr.

JACOB A. ZIMMERMAN, 1358 Broadway, has been awarded the general contract for erecting a loft building at 523 Fifth Ave. Hayden & Co., 520 Fifth Ave., are the lessees. Brick and stone, non-fireproof, 6 stories, 32 × 105 ft. The general contracts include everything. G. A. Boehm is Arch., 7 West 42d St.

NEW YORK, N. Y.—The following bids were received by Board of Education Aug. 14 for construction, etc., of a new public school in (a) Boroughs of Manhattan and one in (b) Borough of Richmond: Buckley Realty & Const. Co., Times Bldg., (a) $473,000, (b) $196,400; Thos. Cockerill & Son, 147 Columbus Ave., (a) $468,900, (b) $189,900; Thos. B. Leahy Bldg., Co., 1 East 42d St., (a) $509,321; P. J. Brennan, 1931 Broadway, (a) $455,000; Chas. H. Peckworth, 415 Hudson St., (a) $482,521, (b) $185,908; R. E. Heningham, 4 Court Sq., (a) $454,950; Geo. Hildebrand, 38 Park Row, (a) $462,000, (b) $179,400; Attilio Pasquini, 1123 Broadway, (a) $548,640; Walters & O'Connell, 103 East 125th St., (a) $453,594; Wm. Werner, 892½ Forest Ave., (b) $195,700. C. B. J. Snyder, Supt. Bldgs.

CAPE MAY, N. J.—The Cape May Real Estate Co., Arcade Bldg., Philadelphia, Pa., has invited bids for the erection of a hotel at this place. Brick and steel, fireproof, 5 stories, 175 × 315 ft. Cost, $500,000. A complete power plant will be installed.

JERSEY CITY, N. J.—Clinton & Russell, Archs., 32 Nassau St., New York, have completed plans for new city hospital for Jersey City. It is expected that bids will be advertised for soon. Brick, stone and steel, fireproof, 4 stories, 50 × 60 ft., with two wings, each 40 × 80 ft., 3 stories.

HARRISBURG, PA.—Geo. F. Payne & Co., 401 South Juniper St., Philadelphia, have been awarded contract for an office building at Second and Strawberry Ave., for the Union Trust Co., of Philadelphia. Brick, stone and steel, fireproof, 8 stories, 98 × 24 ft. Wm. H. Cookman is Arch., Philadelphia.

PHILADELPHIA, PA.—DOYLE & DOAK, 1509 Sansom St., has been awarded contract for constructing 24 2-story stores at Broad and Walnut Sts.

Herman Miller, Arch., 1420 Chestnut St., has about completed plans for an apartment house; brick, stone and steel, fireproof, 5 stories, 200 × 25 ft.

W. L. Blithe, Arch., 14 South Broad St., has invited bids for a church and Sunday school at 54th and Catharine Sts., for the Wharton St. M. E. Church. Cost, $100,000.

The contract for constructing residence at Germantown for C. M. Clark has been let to J. E. & A. L. PENNOCK, Land Title Bldg. Cost, $50,000.

Milligan & Webber, Archs., 520 Walnut St., have invited sub-bids for the erection of an apartment house at 45th and Walnut Sts. Cost, $75,000.

MILLERSVILLE, PA.—The School Board has plans ready for bids for a new normal school, to cost $75,000.

ALLENTOWN, PA.—FISSELL & WAGNER, 1135 Broadway, New York, have been awarded contract for new post-office here. Cost, $74,781.

HARRISBURG, PA.—Wm. H. Donaldson has invited bids for the erection of an apartment house at 204-10 North Second St. Brick, 5 stories, 76 × 148 ft.

PHILADELPHIA, PA.—Horace Trumbauer, Arch., Land Title Bldg., has started final plans for new club-house at 16th and Walnut Sts. for the Racquet Club. Brick, stone and steel, fireproof, 5 stories, 140 × 180 ft. Cost, $300,000.

WASHINGTON, D. C.—ISIDORE PAVARINI, 814 18th St., N. W., has received contract for erecting Industrial Home School for the District of Columbia. Cost, $110,000.

WASHINGTON, D. C.—A. O. Von Herbulis, Arch., Kellogg Bldg., is ready for bids for a gymnasium building for the University of Georgetown. Stone and steel, fireproof, 1 story, 75 × 200 ft. Cost, $125,000.

FAIRMONT, W. VA.—Baldwin & Pennington, Archs., 311 North Charles St., Baltimore, Md., are preparing plans for a Masonic Temple building here. Cost, $75,000.

ATHENS, GA.—Haralson Bleckley, Arch., Atlanta, has completed plans for a Y. M. C. A. building, to be erected at the University of Georgia; to be 125 × 175 ft., and cost $75,000.

TALLAHASSEE, FLA.—We are informed that Edwards & Walter, Archs., Columbia, S. C., are preparing plans for a school building to be erected in Tallahassee, to contain 12 rooms and auditorium. Drawings will be completed about Aug 25, and bids will be received until Sept. 10.

MEMPHIS, TENN.—A. B. Groves, Arch., St. Louis, Mo., has prepared plans for an eight-story bank and office building, to be erected at Second and Jefferson Sts. R. E. McGill, Southern Express Co. Bldg., Memphis, is interested. Cost, $250,000.

MEMPHIS, TENN.—Myer J. Strum, Arch., 84 La Salle St., Chicago, Ill., has revised plans and is taking figures on a hospital, to be erected at Memphis for The Women's Hospital. Brick, 4 stories, 45 × 100 ft. Cost, $50,000.

FRANKFORT, KY.—The contract for construction of the new Kentucky Capitol was awarded by the State Commission to the GENERAL SUPPLY & CONSTRUCTION CO., 24 State St., New York, for $880,000. The building is to be of stone from Bedford, Ind., quarries, with granite base.

CLEVELAND, O.—It is announced that $300,000 has been appropriated for a new Wabash-Wheeling & Lake Erie passenger station in Cleveland. G. T. Barnsley is Ch. Engr., Pittsburg, Pa.

MARION, O.—Wilson Eyre, Arch., 35 West 21st St., New York, has completed plans for a residence to be erected at Marion for G. W. King, of the same city. Brick and marble, 3 stories, 45 × 115 ft. The general contract will include everything. Cost, $100,000.

TIFFIN, O.—We are informed that the contract for proposed dormitory for girls to be erected at the Heidelberg University will be let about Sept. 1. Chas. E. Miller, Pres.; Patton & Miller, Archs., Chicago, Ill. Cost, $30,000.

INDIANAPOLIS, IND.—The Labb & Given Amusement Co., of Broad Ripple, Ind., is planning to build somewhere in or near Indianapolis an amusement place similar to the "White City" of Chicago. Site will be chosen soon and plans for buildings are now about completed. Cost, $150,000.

INDIANAPOLIS, IND. — JOHN PIERCE has been awarded contract for the erection of new Knights of Pythias Building in this city, for $400,000.

INDIANAPOLIS, IND.—Trustees of the Herron Art Institute will soon ask for bids for the construction of an $80,000 building.

The contract for construction of new cathedral at 14th and Meridian Sts., has been let to ALBERT VON SPRECKELSON for $109,445.

John Lazarus, Chn. Bldg. Com., has asked architects to submit plans for the new proposed Board of Trade Building.

ADRIAN, MICH.—C. Fred Matthews, of Adrian, was the lowest bidder at $33,538, for construction of U. S. post-office at Adrian, bids for which were opened Aug. 7.

ROCKFORD, ILL.—Winchester & Cullen were the lowest bidders for the completion of the city hall. Their bid was $66,385.

MONMOUTH, ILL.—Bids will be received by the Monmouth Hotel Co. until Aug. 26 for the erection of a three-story hotel, 93 × 130 ft. Herbert E. Hewitt, Arch., 22 Arcade Bldg., Peoria, Ill. Cost, $55,000.

CHICAGO, ILL.—W. H. Barry, 164 Dearborn St., will erect this fall 20 flat buildings in various parts of the city. E. J. Obrenstein, Arch., 164 Dearborn St. Cost, $400,000.

CHICAGO, ILL.—Bids were received Aug. 9 by Trustees Sanitary District of Chicago, Isham Randolph, Ch. Engr., for alterations and reconstruction on the Seipp Building, the work being necessary in order to widen the Chicago River at Van Buren St., and 200 ft. south. For the completed work William Adams Co., Chicago, bid $65,763, and Gindele Bros. & Co., Chicago, bid $88,737. In addition bids were taken on excavation work, a coffer dam and concrete in dock, Gindele Bros. & Co., offering a bid of $38,175 for this work, making their total on all of the items $127,276. For the building work not including cylinder piers, bids were received as follows: William Adams Co., $50,572, and $51,092; Gindele Bros. & Co., $73,155.

CHICAGO, ILL.—T. W. Wing, Arch., 185 Dearborn St., has made sketches for an apartment building, to be erected at 56th St. and Madison Ave., for A. R. Boydell. Brick and stone, 3 stories, 144 × 50 ft. Cost, $100,000.

Jenney, Mundie & Jensen, Archs., 171 La Salle St., have completed plans and are ready for bids for alterations and additions to hotel at Michigan Ave. and 12th St., for Dr. L. B. Baldwin. Building is to be converted into a hospital. Dormitory for nurses, laundry, kitchen and operation rooms will be added. Cost, $150,000.

Holabird & Roche, Archs., 100 Jackson Boulevard, have completed plans and are taking figures on addition to Marquette Bldg., on Adams St., for Aldis & Co., Monadnock Block. Brick, steel and terra cotta, composition roof. Cost, $600,000.

Bids are being received by Watson & Hazelton, Archs., 303 Dearborn St., for a residence for Mrs. H. J. Bardwell, to cost $60,000.

Plans have been prepared by H. L. Newhouse, Arch., for an apartment house to be built at 47th St. and Lake Ave., for N. P. Cummings. Bids will be received by architect until Sept. 1. Cost, $200,000.

Nelson & Lewin, Evanston and Devan Aves., will erect an apartment building at Sheridan Park. Cost, $75,000.

P. Hale, Arch., has made plans for 12 flat buildings, to be erected at Congress and 45th Sts., for J. J. Lyons, Congress and 45th Sts. Bids will be received by owner. Cost, $60,000.

PLATTEVILLE, WIS.—The plans of Van Ryn & De Gelleke, Archs., Milwaukee, have been accepted by Board of Normal Regents for new normal school to be built at Platteville. Cost, $120,000.

MINNEAPOLIS, MINN.—The Palace Clothing Co. will erect a 12-story building on Nicollet Ave. The building will be used for manufacturing as well as for retail purposes.

ST. PAUL, MINN.—Trustees of the Soldiers' Home have awarded the drawing of plans for new building to A. F. Gauger, Arch., St. Paul. Cost, $75,000.

BISMARCK, N. DAK.—The State Capitol Committee will soon advertise for plans for a three-story and basement state capitol building to be erected at a cost of $1,000,000. Plans will also be asked for a two-story governor's residence to cost $50,000.

KIRKSVILLE, MO.—We are informed that bids will be received until 1 p. m., Aug. 21 for erecting jail and jailer's residence. Tyler Paine, Supt.

SEATTLE, WASH.—Thos. Burke, 912 Second Ave., will build a 12-story reinforced concrete building, 60 × 108 ft., to cost $250,000.

LOS ANGELES, CAL.—Plans for building for The Little Sisters of the Poor are being prepared by John Parkinson, Arch., 606 Laughlin Bldg., Los Angeles. Cost, $225,000.

TORONTO, ONT.—Curry, Sproatt & Rolph, Archs., of Toronto, have plans for nurses' home in connection with the Hospital for Sick Children. Est. cost, $60,000.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

POULTNEY, VT.—We are informed that it is proposed to install a pumping plant to pump from one lake to the other, a distance of 1,400 to 1,500 ft. Pipe, etc., will be needed. It is probable that gasoline engine and triplex pump will be installed. Extension is to be made for Poultney water-works. R. G. Johnson, Supt. and official in charge.

SOUTH FRAMINGHAM, MASS.—Town Water Committee has awarded following contracts for material for projected water-works extension: Pipe, M. J. DRUMMOND & CO., New York; special castings, BUILDERS IRON FOUNDRY, Providence, R. I.; hydrants, RENSSELAER MFG. CO., Troy, N. Y.; gates, COFFIN VALVE CO.

FRAMINGHAM, MASS.—Bids are asked by Water Supply Committee, H. L. Davenport, Secy., until Aug. 24 for laying cast-iron water pipe. J. J. Van Valkenburgh, Town Engr., South Framingham, Mass.

WEST SPRINGFIELD, MASS.—Bids are asked by Water Commissioners, George N. Norris, until noon, Aug. 19, for laying 5,350 ft. of cast-iron water pipe in and near Rogers Ave.

TORRINGTON, CONN.—Torrington Water Co. has purchased Marshall Lake, and will, it is stated, lay a main about three miles long to connect it with main at West Torrington.

GREENWICH, CONN.—Bids are asked by A. B. Hill, Engr., 100 Crown St., New Haven, Conn., until noon, Aug. 25 for construction of a concrete dam containing about 2,500 cu. yds., for the Greenwich Water Co. (Advertised, Engineering News.)

NEW YORK, N. Y.—Following bids were received Aug. 9 by Commissioner Water Supply, Gas and Electricity for erection of new Gravesend pumping station, Brooklyn: J. McArthur, 22 Ormond Pl., $28,221; Behan & Cavanagh, 23d St. and 4th Ave., $26,583; Geo. T. Driscoll, 371 Fulton St., Brooklyn, $29,900; Ryan & McTerran, 106 East 23d St., $22,733; Geo. Hildebrand, 38 Park Row, $26,200; C. Meads & Co., 299 Broadway, $27,620; D. J. Ryan, 723 3d Ave., Brooklyn, $25,560; Thos. G. Carlin, 44 Court St., $26,990; Fuller & O'Connor, $26,665; R. J. T. Gerstle Co., 44th St. and 1st Ave., $27,572; R. E. Heninghan, 4 Court Sq., $25,363.

ONEIDA, N. Y.—Bids were received Aug. 8 by this city, C. M. Ruggles, Cy. Clk., for construction of concrete dam, pipe line, etc., the contract being awarded to T. D. ALLEN & CO., Oneida, on the following bid: Concrete dam, $17,914; pipe line, $7,691; grubbing, clearing and fencing, $4,224. Finch-Anderson Co., Glens Falls, N. Y., submitted a bid of $21,582 for concrete dam only.

BURLINGTON, N. J.—We are informed that no action has been taken as yet toward securing new 3,000,000-gallon pump for city water-works. G. A. Atkinson is Supt.

CRANBURY, N. J.—W. E. Sexton, 1910 Market St., Philadelphia, and C. S. York, Baltimore, Md., have been engaged jointly to prepare plans and specifications and supervise the construction of a water-works system at this place for the Cranbury Water Co. Bids are to be called for in about four weeks.

FORT HANCOCK, N. J.—Bids are asked until Sept. 11 for sinking tubular deep well at this post. Abe. S. Bickham, Q. M.

INDIANA, PA.—It is stated that the Clymer Water Co. will shortly begin improvements to cost in the neighborhood of $50,000. The improvements will include the building of two 1,500,000-gallon reservoirs and the laying of a 12-in. main from the pumping station on Twolick Creek to this place.

ASHLAND, PA.—Bids were received Aug. 1 by Borough Council for building additions to water distributing system, the contract being awarded Aug. 11 to DE NALLO & KLINGBERG, Kingston, N. Y., for $16,552.

PHILADELPHIA, PA.—Bids are asked by Department Public Works, A. Lincoln Acker, Dir., until noon, Sept. 6, for filtering materials and collectors for the Torresdale filters. (Advertised, Engineering News.)

WILMINGTON, DEL.—Bids are asked by Board Water Commissioners until 1.30 p. m. Sept. 4 for constructing 35,000,000-gallon reservoir. Theodore A. Leisen, Ch. Engr. (Advertised, Engineering News.)

WASHINGTON, D. C.—Bids are asked by Commissioner of Indian Affairs, Washington, until 2 p. m. Sept. 7 for material and labor for construction of water system and laundry building at Sac and Fox School, Iowa. William G. Marlin, Supt., Toledo, O.

RICHMOND, VA.—Bids are asked by Chas. E. Bolling, Supt. W.-W., until 5 p. m., Sept. 5, for construction of steel reinforced concrete conduit; also for furnishing and laying 36-in. or 42-in. cast iron pipe. (Advertised, Engineering News.)

ASHEVILLE, N. C.—We are informed that matter of storage reservoir for this city is being discussed. B. M. Lee is Cy. Engr.

COLUMBIA, S. C.—Bids were opened Aug. 8 by Board Water Commissioners, J. W. Babcock, Chn., for constructing water-works, the contract for the general construction work being awarded to GEO. O. TENNEY, Spartanburg, S. C., for $153,694. Contracts for the other items of the work are to be awarded later. J. L. Ludlow, Engr., Winston, N. C.

MONROE, GA.—Bids are asked by Mayor and Council until 2 p. m., Aug. 28, for machinery, material and construction of water-works. Proposed system will consist of two 750,000-gallon pumps; 15 × 110-ft. standpipe; 40-gallon per minute pump and induction motor filter plant; 500 tons 10-in., 8-in. and 6-in. pipe; 45 hydrants, building, storage reservoir, clear water well, etc. E. P. Nowell, Mayor; J. B. McCrary, Engr., Senoia, Ga.

MARKSVILLE, LA.—Specifications for the construction of a system of water-works and electric lights for this town may be seen at office of Engineering News, 220 Broadway, New York. Bids are asked by Mayor C. A. Smith until Aug. 24, as was advertised in Engineering News of July 27. Ira W. Sylvester, Engr., Alexandria, La.

PETERSBURG, TENN.—Contract for laying about two miles of water mains in the city has been let to PERKINS & FLINN.

PRINCETON, KY.—We are advised that this city has deposited in a bank the proceeds of a $35,000 bond issue and has authorized Granberry Jackson, Engr., Nashville, Tenn., to have specifications printed for the work. The following items will be required: Pipe and specials; hydrants and valves; two 80 HP. boilers; heater and feed-pump; two 750,000 gallons duplex pumps; air lift plant for wells; surface reservoir, brick power house, etc.

FREDERICKTON, O.—Bids are asked by Board Public Affairs, L. B. Ackerman, Secy., until noon, Aug. 25, for the construction of water-works. Thomas Cureton, Engr., Columbus, O.

CINCINNATI, O.—Water-Works Commissioners on Aug. 4 awarded following contracts: Laying 42-in. and 48-in. mains in Eggleston Ave. and Ninth St., KEELING & RIDGE, Pittsburg Pa., $44,742; electrically operated valves and other valves, COFFIN VALVE CO., Boston, Mass., $53,696; mudgates and other valves, FAIRBANKS CO., Pittsburg, Pa., $74,157.

MARION, IND.—We are informed that bids will be received on Aug 22 by Board Public Service for constructing 2,000,000-gallon reservoir. T. E. Petrie, Cy. Engr.

MARION, IND.—Bids are asked by Board Public Works, John O. Willson, Clk., until 9.30 a. m. Aug. 29 for laying water main extensions in several streets.

WEST BRANCH, MICH.—We are advised under date of Aug. 8 that this city is seeking a well driver to put in an 8-in. test well on the hills for gravity system. It is proposed to convey water to city through 10-in. iron pipe and to distribute it through 4-in., 6-in. and 8-in. pipes. Supply is to be obtained about 2¼ miles from city. Designing Engineer had not been secured. B. Bennett is Mayor.

GRAND RAPIDS, MICH.—The time for receiving bids for constructing a stand-pipe or elevated tank of concrete steel or steel, 80 ft. high and 50 ft. diameter, for this city, has been extended from Aug. 11 to Aug. 25, as is stated in our advertising columns.

CHICAGO, ILL.—Contract for constructing brick water tunnel, bids opened July 29 by Commissioner of Public Works, has been awarded to JACKSON & CORBETT CO., The Rookery, Chicago, for $137,617. Contract for building a tunnel connecting 39th St. pumping station was let to P. C. STADLER, 890 Millard Ave., Chicago.

BRADLEY, ILL.—We are informed that contract will be let Aug. 26 at 8 p. m. for 4-in. and 8-in. mains, 36 hydrants, etc., for the municipal water-works. Est. cost is $16,000. Geo. C. Morgan, Chicago, Ill., is Des. Engr. Eben B. Gower is Town Atty.

MANITOWOC, WIS.—City Council has requested John S. Unger, Cy. Surv., to prepare plans and specifications for new water-works. The franchise of the present company which supplies the city will expire in two years. The present supply is taken from a shallow well near shore of Lake Michigan.

MILWAUKEE, WIS.—Bids are asked by Board Public Works, Chas. J. Poetsch, Pres., until 10.30 a. m. Aug. 18, for furnishing and erecting two return tubular boilers in North Point pumping station.

WEST ALLIS, WIS.—Bids are asked by Village Board, H. D. Hill, Village Clk., until 8 p. m. Aug. 19, for material and labor for construction of distribution portion of water-works to be constructed for this village. There is approximately 16,473 ft. 6-in. pipe, 11,277 ft. 8-in. pipe and 9,023 ft. 12-in. pipe. Water will be supplied by city of Milwaukee. Chas. J. Poetsch, Cy. Engr., Milwaukee, is special water-works engineer for the village.

LA CROSSE, WIS.—We are advised that Board Public Works proposes to make several extensions of 6-in., 8-in. and 12-in. water mains, at an est. cost of $20,000. Frank Powell is Cy. Engr.

AMES, IA.—Bids are asked by City Council, A. B. Maxwell, Cy. Clk., until 8 p. m. Sept. 4 for constructing extension of city water-works, consisting of about four miles of mains, steel tank and tower, concrete reservoir, well, electric deep well pumping plant and fire pump. A. Marston, Engr. (Advertised, Engineering News.)

CLINTON, MINN.—Contract for water-works extension and new pumping engine at this place has been let to CAPT. R. H. CHAPMAN, Ortonville, Minn., for about $6,300.

COMFREY, MINN.—Contract for water-works for this village has been let to DES MOINES BRIDGE & IRON WORKS, for about $7,500.

DETROIT, MINN.—Water and Light Commission, G. C. Nunn, Secy., will receive bids until 2 p. m. Aug. 22 for laying water mains as follows: 1,031 ft. 8-in. mains; 4,883 ft. 6-in. mains; also ten hydrants.

ST. CLOUD, MINN.—We are advised that date for opening bids for 2,000,000-gallon filtration plant for this city was postponed from Aug. 7 to Aug. 21. J. E. Hill, Cy. Engr. Mentioned July 13.

THIEF RIVER FALLS, MINN.—Bids will be received by this city up to 3 p. m. Aug. 22 on a 750 gal. per minute triplex power pump, a 300 gallon per minute deep well pump and a 30 HP. 220 volt direct current motor, all installed. Plans and specifications on file at City Clerk's office and at Consulting Engineer's office. O. Claussen, Consult. Engr., St. Paul, Minn.

BARNESVILLE, MINN.—We are informed that all bids received Aug. 5 for construction of water-works were rejected, and new bids will be received by M. P. Philippi, Cy. Clk., until 8 p. m., Sept. 2. M. A. Earl, Engr., 1416 First National Bank Bldg., Chicago, Ill. Mentioned July 20.

AUBURN, NEB.—William Lawler, Lincoln, Neb., has applied for franchise for construction of water-works and gas plant.

NORFOLK, NEB.—Bids are asked by Julius W. Huff, Cy. Clk., until 6 p. m., Sept. 7, for extension of water mains and location of fire hydrants.

STROMSBURG, NEB.—Bids are asked until Sept. 5 for erection of a stand-pipe, to cost $3,500 to $4,000. C. V. Nelson is Cy. Clk.

PARIS, TEX.—We are informed that no bids were received Aug. 7 by this city for extension to city water-works; est. cost, $1,000. Work requires 222 ft. 16-in. cast iron pipe, Class A., three 16-in. elbows, three 16 × 16 × 16 tees, one 16-in. screen, four 16-in. gate valves, 47 piles 10 ft. to 45 ft., and 4,000 ft. B. M. lumber. If satisfactory bid is received in near feature the work will be let by contract. Hugh M. Price, Cy. Engr., is official in charge.

SEATTLE, WASH.—Bids were received Aug. 5 by Board Public Works for laying water mains in Lane St. and other streets, the contract being awarded to INTERNATIONAL CONTRACT CO., 738 New York Block, Seattle, for $25,206.

CORVALLIS, ORE.—We are informed that plans and specifications will soon be completed for new water-works for this city, and bids likely will be called for inside of 45 days. Source of new supply is mountain stream, 16 miles distant, and est. cost of works is $74,000. P. Avery is Chn. W. Com.; A. J. Johnson is Mayor.

TURLOCK, CAL.—We are informed that bids will be opened Sept. 5 by Turlock Irrigation District, John L. Brown, Secy., for repair work on irrigation canal.

PLEASANT GROVE, UTAH.—We are advised that a vote was to be taken Aug. 15 on raising $20,000 of bonds for water-works for this city. The system will consist of a concrete covered reservoir of about 80,000 gallons capacity; 1 mile of 8-in. or 10-in. pipe; 3,500 ft. of 6-in. or 8-in. or 12,500 ft. of 4-in. pipe and 1 fire hydrant; service pipe for public use, valves, hydrants, and specials. The engineers are Wilson, Engrs., 23 Metcalf Block, Ogden, and Lyman & Lyman, University of Utah, Salt Lake City, Utah, have been employed for the work, on condition that a majority vote is obtained in favor of the bond issue.

WINNIPEG, MAN.—Bids were received July 31 by this city, C. J. [illegible], Cy. Clk., for supplying stop cocks, [illegible] cocks, the contract being awarded Aug. 7 to CANADA BRASS & SUPPLY CO., London, Ont., for $4,007.

VICTORIA, B. C.—Bids are asked by W. Northcott, Purchasing Agent, until 3 p. m., Sept. 18, for supplying [illegible],000 ft. 12-in. and 12,000 ft. 4-in. cast-iron water pipe for this city.

EDMONTON, ALTA.—The time for receiving tenders for an additional pumping engine for this city has been extended from Aug. 15 to Aug. 22, as is stated in our advertising columns.

BANFF, ALTA.—Bids are asked by Perley G. Keyes, Secy. Dept. of the Interior, Ottawa, Ont., until Aug. 31 for the construction of water-works and sewers for this town. John Galt, Engr., 20 King St., E., Toronto, Ont.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

WEST POINT, N. Y.—The following bids were received by the Quartermaster for constructing storm sewers and surface drainage: Chas. Cooke, Poughkeepsie, $22,000; Thos. E. Vermilyea, New York, $23,000; E. A. Matthews, New York, $23,454; Clark-Dermar Const. Co., $26,000; Donegan & Redmond, Brooklyn, $29,900; Goodwin Const. Co., New York, $32,325; Frank Pigeon, Saugerties, $32,420; Church Const. Co., New York, $34,000; Stacy B. Opdyke, Jr., New York $38,000; Unique Const. Co., Brooklyn, $50,000; Jas. A. Holmes, New York, $71,000.

LESTERSHIRE, N. Y.—The village voted to build trunk sewer at a recent special election.

EAST AURORA, N. Y.—Preliminary surveys have been completed for proposed private sewer system which Elbert G. Hubbard proposes to install at a cost of $3,000.

SCOTIA, N. Y.—Jas. A. Hoyt, Jr., Vil. Clk., informs us that the contract for construction of sewage disposal plant has been awarded to HINMAN & SPROUL, of Schenectady, at $19,475.

TRENTON, N. J.—The ordinance authorizing sewers on North Clinton and South Clinton Aves. has been passed. C. C. Haven is Cy. Engr.

PHILLIPSBURG, N. J.—Bids were received Aug. 5 by Sewer Commission, Robert P. Howell, Town Surv., for construction of sewers, the contract being awarded to WILKES-BARRE CONSTRUCTION CO., Wilkesbarre, Pa., at $6,607. Itemized bill of successful contractor is given under Contract Prices.

NEW BRUNSWICK, N. J.—Sealed proposals will be received by Samuel G. Farrell, St. Comr., until 8 p. m., Aug. 28, for construction of a sewer.

RICHMOND, VA.—The Street Committee has recommended favorably an ordinance to authorize the construction of a sewer, at a cost of $103,000. W. E. Cutshaw is Cy. Engr.

ELKINS, W. VA.—Arrangements are being completed for the construction of sewerage system from Main St. to Tygart River.

LAKE CITY, FLA.—We are informed that Wm. W. Lyon, Engr., of Palatka, has been engaged by the Board of Bond Trustees of Lake City to design and supervise the construction of sanitary sewerage system. Est. cost, $30,000.

ST. AUGUSTINE, FLA.—The city is considering the construction of sewerage system.

PENSACOLA, FLA.—The city will vote on the issuance of $250,000 for sewerage system.

OPELOUSAS, LA.—The city contemplates putting in a sewerage system. E. B. Dubuisson, G. L. Dupre, R. L. Garland, J. W. Lewis and others are a committee to devise ways and means.

PIQUA, O.—Bids are asked by Board Public Service until 12 noon, Aug. 21, for constructing sewers in sundry streets. W. B. Mitchell, Clk.

BEREA, O.—Sealed bids will be received by O. R. Stone, Vil. Clk., until 12 noon, Aug. 21 for construction of a drain of 20-in. sewer tile in West St.

CELINA, O.—A resolution has been passed by Council directing Martin Lutz, Cy. Engr., to prepare plans and specifications for an outlet for sewerage for west part of city.

CINCINNATI, O.—Bids will be received by Geo. F. Holmes, Clk. Bd. Pub. Service, until Aug. 21 for constructing sewers and drains in Burnet Ave.

PORT CLINTON, O.—Bids are asked by W. H. Cleaver, Vil. Clk., until Aug. 28 for construction of a branch sewer in Sewer District No. 9.

PAINESVILLE, O.—Board Public Service will receive sealed bids until noon, Aug. 19, for constructing a sewer in Liberty St. [illegible] W. Kee, Secy.

WILLOUGHBY, O.—Sealed bids will be received by C. C. Jenkins, Vil. Clk., until Sept. 11 for construction of storm sewer in Erie St. Approximately, the sewer will require 1,450 lin. ft. 24-in., 450 ft. 18-in., 875 ft. 15-in., and 500 ft. 12-in. sewer pipe, 9 manholes complete, 16 catch-basins, 12 ft. c.-i. pipe and a concrete retaining wall containing 10 cu. yds. of concrete.

HAMMOND, IND.—Bids will be received by Board Public Works until 10 a. m., Aug. 25, for construction of main sewers. W. F. Bridge, Cy. Engr.

RIVERSIDE, IND.—The Board of Trustees has ordered the construction of a main sewer and branches. Est. cost, $5,000.

SOUTH BEND, IND.—A. J. Hammond, Cy. Engr., has prepared plans and will receive bids about Sept. 1 for pipe sewers in four streets.

WYANDOTTE, MICH.—LENNANE BROS., of Detroit, were awarded contract for a sewerage system for Wyandotte by Board Public Works, for $80,751.

ROCKFORD, ILL.—Bids are asked by President Board Local Improvements until 11 a. m., Aug. 25, for constructing sewers in various streets. Est. cost of work is $11,-235. Edwin Main, Cy. Engr. (Advertised, Engineering News.)

DIXON, ILL.—The Board Local Improvements has ordered the construction of the proposed West End sewer, to cost about $12,000.

EAST ST. LOUIS, ILL.—W. J. Crocken, Cy. Engr., is preparing plans for an outlet sewer system, which, it is estimated, will cost $750,000. An ordinance will be presented to City Council Sept. 1 authorizing the building of same.

DOWNERS GROVE, ILL.—Bids are asked by Board Local Improvements until 7.30 p. m., Aug. 22, for construction of system of storm water drains. W. S. Shields, Engr., 1715 Marquette Bldg., Chicago.

ROCHELLE, ILL.—We are informed that the Iowa Engineering Co., of Clinton, Ia., has completed plans, specifications and estimates for a sewerage system for Rochelle.

GALESBURG, ILL.—Bids are asked by Board Local Improvements until 4 p. m., Aug. 21, for construction of a vitrified pipe sewer in West North St.

WATERTOWN, WIS.—Bids are asked by Board Public Works until Aug. 29 for construction of about 7,000 lin. ft. of sanitary sewers. E. B. Parsons, Cy. Engr.

PERRY, IA.—It is reported that REAGAN BROS., of Des Moines, have secured the contract for construction of ten miles of sewers at Perry.

DEER RIVER, MINN.—It is stated that this city is to vote $7,000 for a sewer system.

WINONA, MINN.—Bids are asked by L. D. Frost, Cy. Recdr., until 8 p. m., Aug. 28, for constructing a storm water sewer.

CAPE GIRARDEAU, MO.—We are informed that this city has been divided into sewer districts and has ordered specifications printed preparatory to calling for bids. Plans for the work were prepared last summer by Granbery Jackson, Engr., Nashville, Tenn.

BENTON, MO.—The contract to build Sewer No. 6 has been let to FRED HOFFMAN & Co., of St. Louis, for $8,374.

SOUTH ST. JOSEPH, MO.—Press reports announce that the Board Public Works will advertise for bids at once for the construction of a main sewer.

BARTLESVILLE, IND. T.—W. H. Whaley, Cy. Engr., informs us that the contract for about 25,000 ft. of pipe sewers has been let to the OKLAHOMA PAVING & CONST. CO. The company will be in the market for 8 and 10-in. shale pipe, standard strength. Est. cost, $17,000.

SEATTLE, WASH.—We are informed that the contract for constructing sewers in Westlake Ave. and other streets has been let to T. RYAN, Sullivan Block, Seattle, at $13,747.

GRANTS PASS, ORE.—Property owners have voted on bonding the city to the amount of $19,000 for two more main sewers.

CLOVERDALE, CAL.—The city has voted to issue bonds for the construction of a sewer system.

OXNARD, CAL.—The city voted July 31 to issue $45,000 bonds for the construction of a sewerage system. C. J. Elliott is Cy. Clk.

BOISE CITY, IDAHO.—Godfrey Sperling, Cy. Engr., writes us that the Lateral Sewer Districts Nos. 101 and 102 are being formed for building about 3¼ miles of sewer laterals. Plans and specifications will be ready later. Jos. Beal, Cy. Clk.

TORONTO, ONT.—City Engineer Rust has recommended the expenditure of $15,885 on new sewers.

VICTORIA, B. C.—Election has resulted in favor of borrowing $100,000 for sewer construction.

GARBAGE DISPOSAL.

The names of parties awarded contracts are printed in capital letters.

NEW YORK, N. Y.—Wm. Bradley, 86th St. and Broadway, at 5 cts. per cu. yd., was low bidder Aug. 7 for removal of snow and ice in the Seventh District, Manhattan Borough.

PHILADELPHIA, PA.—Bids are reported asked by A. Lincoln Acker, Dir. Pub. Wks., until Aug. 23 for cleaning streets—during 1906.

PHILADELPHIA, PA.—HENDERSON & CO., 1221 Arch St., have been awarded contract for the complete plant for the Penn. Reduction Co., which has the contract for disposing of city garbage during 1905.

WHEELING, W. VA.—City engineer is stated to have been directed to prepare plans and estimates for an auxiliary garbage furnace.

KNOXVILLE, TENN.—Board of Health, Dr. W. R. Cochrane, Secy., will ask Council to build a garbage furnace for the consumption of city garbage, dead animals, etc. The cost is estimated at $20,000.

CHICAGO, ILL.—Bids are asked by Department of Public Works, Joseph M. Patterson, Comr., until Sept. 1, for furnishing materials for the collection, removal and disposal of garbage.

SANTA BARBARA, CAL.—Mayor Edwards is to investigate systems of destroying garbage by cremation, looking to the establishment of a plant for the city.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

SALEM, MASS.—Common Council passed a bonding order for $9,200 for paving Union St. G. F. Ashton is Cy. Engr.

EVERETT, MASS.—The Board of Aldermen passed an order appropriating $25,000 to pave Main St.

BOSTON, MASS.—The following contracts were awarded by the State Highway Commission for building state roads, bids for which were opened Aug. 10: In Swampscott, WM. SHEA & SON, Quincy, $2,430; Hadley, LANE CONST. CO., Meriden, Conn., $3,673; Concord, WM. SHEA & SON, $8,395; North Adams, O. T. BENEDICT, Pittsfield, $3,762; Colrain, D. T. BERRY, Brattleboro, Vt., $2,780; Southampton, LANE CONST. CO., $3,866.

BOSTON, MASS.—Bids are asked by the Metropolitan Park Commission, 14 Beacon St., until 12 noon, Aug. 21, for grading Quincy Shore Reservation. John R. Rablin, Engr.

COLLINSVILLE, CONN.—A resolution was passed at a special town meeting held Aug. 5 appropriating $9,000 for good roads.

ROCHESTER, N. Y.—The contract for Harrison St. brick pavement has been let to GEO. W. HAGAMAN CO. for $9,082.

AUBURN, N. Y.—Bids were received Aug. 7 by this city, J. Walter Ackerman, Cy. Engr., for paving Clark St., the contract being let to BRAYER BROS., Auburn, N. Y., at $33,769. Bituilthic pavement, with Auburn curbing and Mack block are to be laid. Itemized bid of successful contractor is given under Contract Prices.

GREENWICH, N. Y.—This town has appropriated $9,000 for the improvement of roads.

TUCKAHOE, N. Y.—Bids are asked by Village Trustees, Thomas J. McCarthy, Clk., until 8 p. m. Aug. 21 for labor and material for regulating, grading and otherwise improving Washington Pl. George H. Rogers, Village Engr. (Advertised, Engineering News.)

UNION, N. J.—Bids are asked by Emil Bautz, Town Clk., until 8 p. m., Aug. 21, for the improvement of Third St.

ELIZABETH, N. J.—We are informed that City Council will open bids Sept. 1 for paving Mary St., from Madison Ave to Jefferson Ave., with 1,000 sq. yds. asphalt on depressed block. W. H. Luster, Jr., is Cy. Surv.

HOBOKEN, N. J.—Contract for paving of Bullsferry Road and Pleasant Ave. has been awarded to the lowest bodder, CALLERY & MURPHY.

WASHINGTON, PA.—The Commissioners of Washington County have petitioned the courts for authority to construct about 40 miles of road.

ESSINGTON, PA.—It is reported that bids are being received by Gilbert Griffin, Supv., Essington, for the macadamizing of Island Road from Essington to Bow Creek, a distance of three miles. The contract will be awarded about Oct. 1.

WAYNESBURG, PA.—We are informed East Waynesburg Borough will vote on bonds on Aug. 20 to pave with vitrified brick one mile of streets.

WILMINGTON, DEL.—Bids are asked by Francis A. Prices, New Castle County State Highway Comr., until 10 a. m. Aug. 29 for building a 12,770 ft. long, 14 ft. wide macadam road. Plans and specifications may be seen at office of Engineering News, 220 Broadway, New York. (Advertised, Engineering News.)

WILMINGTON, DEL.—Bids are asked by Francis A. Price, Highway Comr., until 10 a. m., Aug. 29 for building a macadam road in New Castle County.

UPPER MARLBORO, MD.—Sealed proposals will be received by Road Commissioners until 12 noon, Aug. 22, for improving public highways between the District of Columbia line and Piscataway and between District of Columbia line and College Park through Bladensburg. J. W. P. Somerville, Supt.

MARTINSBURG, W. VA.—The Council has decided to expend $10,000 in paving three squares of streets.

PENSACOLA, FLA.—City will vote on the issuance of $150,000 of bonds for street paving.

CLEVELAND HEIGHTS, O.—Sealed bids will be received by Wm. G. Phare, Vil. Clk., 402 American Trust Bldg., Cleveland, until Aug. 29 for grading Mayfield Road. Wm. H. Evers, Engineering Co., Engr., Arcade Bldg., Cleveland.

PORTSMOUTH, O.—Bids are asked by Board Public Service until Aug. 29 for improving 11th, Washington and Ninth Sts. by grading, curbing and paving roadway with brick, asphalt or tar macadam. Benj. Bratt, Cy. Engr.

PORTSOUTH, O.—Bids are asked by Board Public Service, John M. Wendelkin, Clk., until noon Aug. 29 for paving five streets, the work requiring 32,464 sq. yds. paving, 12,603 lin. ft. curb, 18 manholes, 61 catchbasins, 1,425 lin. ft. 6-in. to 24-in. sewer pipe. Est. cost is $54,246. R. A. Bryan, Engr. (Advertised, Engineering News.)

WOODSTOCK, O.—Bids are asked by M. Sessions, Vil. Clk., until 12 noon, Aug. 19 for constructing about 60,000 sq. ft. of concrete or sawed sandstone sidewalks.

BEDFORD, IND.—Bids will be received until 7 p. m., Aug. 22, for paving ten blocks with vitrified brick. W. M. Denniston, Cy. Clk.

MARTINSVILLE, IND.—The County Commissioners have been enjoined temporarily from letting contract for the construction of 14 miles of gravel road in Clay Township. Bids were to have been opened Aug. 8. The point is made that it is contrary to law to decide by election to issue bonds for the building of gravel roads. The Commissioners contend that the proceedings in the case of Clay Township were legal, and that the court will so decide. The contract will then be let.

CORYDON, IND.—A contract for the construction of 18 miles of free gravel road has been awarded by County Commissioners to CHARLES C. CALVERT, of Scottsburg, for $34,990.

KNOX, IND.—The County Commissioners have sold bonds amounting to $38,000 for the construction of gravel roads in Railroad and Davis Townships, for which bids are now being asked.

DANVILLE, IND.—The Commissioners of Hendricks and Marion Counties have let contract to BOONE COUNTY CONSTRUCTION CO. to build the Frazer gravel road at $6,-467, and to J. M. LITTLE the contract to build the Gladden Road for $8,256.

TERRE HAUTE, IND.—The contract for graveling Spruce St., from 16th St. to 25th St., has been awarded to L. P. PERDUE by the Board Public Works at $10,449.

KALAMAZOO, MICH.—Bids were received Aug. 7 by this city, M. C. Taft, Cy. Engr., for paving West Main St., from the M. C. R. R. to a point 50 ft. west of the Mountain Home Cemetery Gate, the work requiring about 11,000 sq. yds. pavement and 1,200 lin. ft. combined curb and gutter. The contract was awarded to ROY WILLIAMS, Connersville, Ind., for Metropolitan block on a 6-in. Portland cement concrete foundation with "Pioneer" asphalt filler.

DETROIT, MICH.—Sealed proposals will be received at the office of Department of Parks and Boulevards, 9 Peninsula Bank Bldg., until Aug. 28 for construction of macadam roadway on various streets. R. E. Bolger, Comr.

STERLING, ILL.—The City Council has passed the paving ordinance authorizing the paving of West Fourth St. and Avenue B., making a total of 13½ blocks, at an estimated cost of $32,158.

CHICAGO, ILL.—Roger J. Marey, 225 Dearborn St., Chicago, will let to contractors about 30,000 sq. yds. of paving, about 100 miles from Chicago. (Advertised, Engineering News.)

JANESVILLE, WIS.—We are informed that sealed proposals will be received until Sept. 11 by the Street Assessment Committee for macadamizing a portion of Milwaukee Ave. C. V. Kerch, Cy. Engr. The work includes 3,704 sq. yds. of macadam and 1,884 ft. of cement curb and gutter.

CEDAR RAPIDS, IA.—All bids received by City Clerk for brick paving on Eighth and Fifth Sts. and B Ave. were rejected and new bids will be advertised for soon.

ST. PAUL, MINN.—The contract for resurfacing of the Point Douglas Road has been awarded to JAMES FORRESTAL CO., of St. Paul, at $5,070.

OTTAWA, KAN.—W. O. Myers, Cy. Engr., informs us that bids will be received until 5 p. m., Aug. 23 for grading, curbing and guttering Cedar St., from Fourth to Ninth St. The work includes approximately 2,500 cu. yds. of excavation and 5,400 lin. ft. of combined curb and gutter.

HUTCHINSON, KAN.—We are informed that an ordinance has been passed to pave Avenue A East, nine blocks, with bitulithic. Bids will be advertised for in about two weeks. T. G. Elbury, Cy. Engr.

SEATTLE, WASH.—Following bids were received Aug. 5 by Board Public Works for laying wooden sidewalks in Grant Boulevard and other streets: Wm. Stanley & Co., Seattle, $41,562; J. A. Bailey, Seattle, $36,-410.

SEATTLE, WASH.—The following contracts have been awarded by C. B. Bagley, Secy. Bd. Pub. Wks.: Grading and regrading Third Ave. and other streets, C. J. ERICKSON, $42,552; bridge roadway, University St., FLAGG & BENNETT, $3,885; concrete sidewalks, 15th Ave. N. E., THORSVIG & LINDLAND, $2,602; concrete walks, First Ave. N., N. D. JOHNSON, $2,607.

SAN FRANCISCO, CAL.—The Board of Works has been authorized to expend $17,-500 for the improvement of roadway from Ocean Ave. to county line. Thos. P. Woodward is Cy. Engr.

WINNIPEG, MAN.—City Council has ordered tenders to be called for asphalt paving, granolithic walks, macadam cedar block pavement, plank walks and sewers, the whole estimated by City Engineer to cost $201,100.

VANCOUVER, B. C.—ARMSTRONG & CO. have secured contract for wood block paving in this city, to cost $138,000.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

ROCHESTER, N. Y.—The capacity of the blast furnace at Charlotte, owned by Corrigan & McKinney, will be doubled. Plans are being prepared for a new 100-ton stack and other improvements which will cost about $500,000. The New York Central & Hudson River Ry. Co. will lay several thousand feet of additional tracks.

NEW YORK, N. Y.—ANDREW J. ROBINSON CO., 123 East 23d St., has contract for factory building on Beach St. for the Protestant Episcopal Society for Promoting Religion in State of New York. Cost, about $225,000. Charles C. Haight, 452 Fifth Ave., New York, is Arch.

THOMPSON, N. Y.—A. A. PARKER, Waterford, N. Y., has the contract to erect a paper mill, at Thompson, for the Iroquois Pulp & Paper Co.

CAMDEN, N. J.—The Silas N. Lacy Cash Register & Supply Co. has incorporated, with a capital of $50,000, to manufacture cash registers. Silas N. Lacy, Lawrence M. Verga and Harrison H. Voorhees are the incorporators.

NORTHAMPTON, PA.—The Northampton Brewing Co. will receive sub-bids for an addition to its brewery. Cost, $50,000.

BRADFORD, PA.—The S. H. WOODRUFF CONSTRUCTION CO., of Buffalo, N. Y., has been awarded contract for a concrete and steel building for the Boviard & Seyfand Mfg. Co.

READING, PA.—The Reading Brewery Co. will remodel its plant. Bids are asked by K. W. Penckert, Arch., 310 Chestnut St., Philadelphia. It is said that new equipment will be required.

WARREN, PA.—We are informed that the Rogers-Shear Co., of Warren, is in the market for a large quantity of small iron or steel wedges.

PHILADELPHIA, PA.—APPLETON & BURRELL, 1204 Chancellor St., have been awarded contract for a foundry at Third and Westmoreland Sts., for the Bernstein Mfg. Co.

J. E. & A. L. PENNOCK, Land Title Bldg., have been awarded contract for a laundry building at 40th and Parrish Sts., for the West Philadelphia Hospital for Women.

ALLENTOWN, PA.—O. C. DONECKER has the contract for the erection of a 1-story brick brass works for Richard C. Meisterknecht, at 714 North Fourth St.

Jacoby & Weishampel, Archs., 623 Commonwealth Bldg., Allentown, have plans for a 4-story factory building for the Lehigh Valley Shoe Co.

BALTIMORE, MD.—James E. Laferty, Arch., Builders' Exchange, will take bids on a carriage factory to be erected at Fremont Ave. and Lombard St., for Martin J. Kohn.

GLENDALE, W. VA.—Plans are being prepared for a factory for the National Bed Co., to be erected at Glendale. Company is now located at Moundsville, from which city it will remove.

ASHEVILLE, N. C. — The Blue Ridge Churn Co. will build a factory in Asheville to manufacture churns. It is capitalized at $10,000. The officers are: H. M. Brown, Pres.; Chas. G. Lee, Secy. and Treas., and S. P. Davis, Mgr.

COLUMBUS, GA.—The Georgia Manufacturing Co. has awarded contract to L. E. WOOTEN for a new mill building. Cost, about $40,000. Noted on August 3.

HUNTSVILLE, ALA.—The Huntsville Cotton Mills Co. will overhaul its mill and probably will add machinery. Luke Matthews is Gen. Mgr.

ANNISTON, ALA.—The Anniston Fertilizer & Ice Co. has organized with $50,000 capital. C. J. Houser is Pres.; L. Mallory is Secy. and Gen. Mgr.

LOUIN, MISS.—Company will be incorporated in Mississippi to build turpentine stills and saw mill at Louin. The promoters are all residents of Dublin, Ga. President is J. E. Smith, Jr.; Vice-Pres., T. J. Pritchett; Secy., and Treas., J. H. Beacham; Auditor, James M. Finn; Gen. Mgr., S. H. Fuller.

CHATTANOOGA, TENN.—The Bridgeport plant of the United States Cast Iron Pipe & Foundry Co. will be removed from Bridgeport, Ala., to Chattanooga, it is reported, this fall. D. Giles is the Resident Mgr. of the company.

MEMPHIS, TENN.—L. P. Dowda, of Atlanta, Ga., is raising stock for the establishment of a leather collar factory in Memphis. The Hart Mfg. Co., of Memphis, is interested.

MEMPHIS, TENN.—The Tennessee Fiber Co. will erect an additional plant on Wolf River and Illinois Central Ry. Jones & Furbinger are Archs.

NASHVILLE, TENN.—The Hill Trunk Co. will increase its capital stock. New machinery will be installed. Andrew J. Ewing is Supt. Walter McComb, Jr., is Gen. Mgr.

BUCYRUS, O.—Local capitalists have organized a company with $100,000 cap. stock to establish a plant for the manufacture of steel castings. Work will begin on plant early in September.

R. Craib, Arch., Bolton Ave., has let contract for mason work to ROTHENBECKER BROS., Superior Bldg., for the erection of factory building for John Amsfield & Co., Seneca St. Cost, $25,000.

GEO. B. McMILLAN, Chamber of Commerce Bldg., has the general contract for factory building for the Baker & Motor Vehicle Co., on Seward St. Corlett Engineering Co., Engr., Cuyahoga Bldg. Cost, $90,000.

OTSEGO, MICH.—Chas. Moses, 138 Washington St., Chicago, Ill., has received the general contract for paper mill to be erected at Otsego for the MacSim Bar Paper Co., Otsego. D. J. Albertson is Engr., Kalamazoo, Mich. Cost, $100,000.

EAST ST. LOUIS, ILL.—J. M. Dunham, Arch., Odd Fellows Bldg., St. Louis, Mo., has prepared plans and will take figures until Aug. 20 for a three-story factory building, 58 × 125 ft., for the Layton Pure Food Co., at East St. Louis. Cost, $50,000.

BELOIT, WIS.—A. F. Pashley, Arch., 315 Dearborn St., Chicago, is ready for figures on a factory building, to be erected at Beloit, for C. H. Bisby & Co., 19 South Clinton St., Chicago. Reinforced concrete, fireproof, 2 stories, 50 × 175 ft.

MARINETTE, WIS.—A paper mill will be established here by Perley Lowe & Co. Buildings and plant, including a pulp and paper mill with machinery, will cost $500,000.

DAVENPORT, IA.—Temple, Burrows & McLane, Archs., will prepare plans and take figures for an addition to building for the Independent Baking Co., G. M. Beckel, Pres., 119 East Front St. Cost, $15,000.

TOLEDO, IA.—Sealed proposals will be received by Commissioner of Indian Affairs, Department of Interior, Washington, D. C., until Sept. 7 for constructing a brick laundry building at the Sac and Fox School, Iowa.

MINNEAPOLIS, MINN.—The Northern Engineering Co. has been incorporated with $25,000 cap. stock. The company will establish a plant in Minneapolis. T. L. Hays is Pres.

ST. CLOUD, MINN.—John Winder, 608 Lumber Exchange, Minneapolis, has been awarded contract for the erection of a new paper mill plant at St. Cloud. Cost, $200,000.

RED WING, MINN.—A. F. Gauger, Arch., 302 Scandinavian-American Bank Bldg., St. Paul, has plans for a boat factory and machine shop for the Red Wing Boat Co., at Red Wing. Cost, $12,000.

OMAHA, NEB.—Contract for the erection of additions to Adams & Kelly Co.'s sash and door factory and planing mill was awarded to PARKS, JOHNSON & PARKS. Cost, $75,000.

YUBA CITY, CAL.—C. A. Rand, Mgr., of the local plant of Rosenberg Bros., is reported as stating that the Golden State Packing Co., incorporated at $1,000,000, has absorbed the Rosenberg plant and will, in addition to the dried fruit department, soon install one of the largest canning plants in this part of the State.

MARYSVILLE, CAL.—C. F. Aaron, Secy. Marysville Chamber of Commerce, is looking into the matter of establishing a glass factory here.

RENO, NEV.—A project is under way for the construction of a large cement plant near Reno costing $100,000. Mike Sullivan, of Reno, is interested.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

FENCE.—Fort Wadsworth, N. Y.—Bids are asked until Sept. 10 for building woven wire fence at this post. Lt. Edmund T. Welsel, Q. M.

PIER.—Boston, Mass.—Bids are asked by Bureau Yards and Docks, Washington, D. C., until 11 a. m. Sept. 9 for a pile and timber pier at Boston Navy Yard.

WHARF REPAIRS.—Portland, Ore.—Bids are asked until noon Aug. 29 for repairs to wharf at light house depot, Astoria, Ore. Maj. W. C. Langfitt, U. S. Engrs.

DITCH WORK.—Chelsea, Mich.—Contract for constructing four mile ditch in Washtenau County has been let to TIMOTHY FOOHEY & SON, Fort Wayne, Ind., for about $10,859.

RIVER PURIFICATION.—Elizabeth, N. J.—We are advised that City Council is considering a plan for purifying the Elizabeth River. Est. cost is about $250,000. W. H. Luster, Jr., is Cy. Surv.

RETAINING WALL.—Mount Holly, N. J.—Bids are asked by Committee County Freeholders, Turner Birkhead, until 11 a. m. Aug. 24 for construction of retaining wall in township of Burlington.

DREDGING.—Boston, Mass.—Bids are asked by Harbor and Land Commissioners, State House, until 2 p. m. Aug. 24 for about 10,400 cu. yds. dredging from northwesterly point of Hussey Shoal, Nantucket Harbor.

DREDGING.—Columbus, O.—The State Board of Public Works, C. E. Perkins, Ch. Engr., will, it is stated, open bids Sept. 1 for excavation and dredging for deepening and widening Northern Division of the Ohio Canal.

VESSEL.—Washington, D. C.—Bids are asked by Light House Board, Rear Admiral B. P. Lamberton, Chn., until Sept. 14 for labor and material for construction of twin-screw steel steam light-house tender "Sunflower."

CEMENT.—Billings, Mont.—Bids are asked at office of engineer, U. S. Reclamation Service, Billings, until 10 a. m. Sept. 5 for furnishing 7,000 bbls. Portland cement, f. o. b. cars at works of bidder. (Advertised, Engineering News.)

SUBWAY SYSTEM.—Fitchburg, Mass.—G. M. GEST, subway contractor, of New York and Cincinnati, has been awarded a contract at Fitchburg, Mass., for the construction of a complete subway system for the Fitchburg Gas & Electric Light Co.

FIRE ALARM TELEGRAPH.—Bids are asked by Fire Commissioner, 157 East 67th St., until 10.30 a. m., Aug. 21 for furnishing labor and materials for alterations and additions to fire alarm telegraph system in Borough of Richmond.

CANAL EXCAVATION. — Chattanooga, Tenn.—Bids are asked until Sept. 15 for canal excavation at Colbert and Bee Tree Shoals, near Riverton, Ala. Major H. C. Newcomer, U. S. Engrs. (Advertised, Engineering News.)

DREDGING.—New York, N. Y.—Bids are asked until Sept. 12 for dredging in Rondout Harbor, N. Y. Bids are also asked until Sept. 12 for dredging in Hudson River, N. Y., the official advertisement for both pieces of work appearing in the Engineering News.

DREDGING.—Boston, Mass.—State Harbor and Land Commissioners have awarded contract for about 20,250 cu. yds. dredging to BAY STATE DREDGING CO., for $8,255. Contract for dredging certain parts of Boston Harbor was let to EASTERN DREDGING CO.

DREDGING.—Plymouth, Ind.—We are informed that contract for 122,000 cu. yds. of dredging in Marshall County has been awarded to E. A. FRANCE & SONS, Fort Wayne, Ind., for $8,875. Bids were opened Aug. 7 by John C. Butler, Constructing Engr.

CONDUIT WORK.—New York, N. Y.—Bids are asked by Fire Commissioner, 157 East 67th St., until 10.30 a. m., Aug. 22 for furnishing labor and materials for placing conduits of the Fire Department telegraph and alarm system underground in the Borough of Brooklyn.

LATHE, MACHINE TOOLS, ETC.—Washington, D. C.—Bids are asked by D. W. Ross, General Purchasing Officer, Isthmian Canal Commission, until Sept. 13 for furnishing precision lathe, machine tools, stocks and dies, gasoline engine and accessories, gasoline reservoir, circular saws, etc.

SEA WALL.—Boston, Mass.—Bids are asked by State Harbor and Land Commissioners, State House, until 2 p. m. Aug. 24 for building extension to sea wall and jetties at Stoney Beach, Hull. About 290 lin. ft. concrete sea wall and 100 lin. ft. of concrete spur jetties are to be built.

HOIST.—Washington, D. C.—Specifications for furnishing 15-ton auxiliary hoist for 100-ton crane at New York Navy Yard may be seen at office of Engineering News, 220 Broadway, New York. Bids are asked by Bureau Yards and Docks until Sept. 16, as was stated in our issue of Aug. 10.

SUBWAY.—Pittsburg, Pa.—A syndicate, headed by Murray A. Verner and Mayor Wm. B. Hayes, has applied for a charter under which will be constructed in this city a complete subway system at a cost of $10,000,000. It is reported that work will be commenced as soon as the charters are obtained.

BREAKWATER.—Boston, Mass.—Plans and specifications for building stone breakwater at Vineyard Haven Harbor, Tisbury, may be seen at office of Engineering News, 220 Broadway, New York. Bids are asked by State Harbor and Land Commissioners until Aug. 24, as was advertised in Engineering News of Aug. 10.

DRAINAGE WORK.—Miami, Fla.—Specifications for excavating about 1,000,000 cu. yds. sand and muck in constructing main canal, and for excavating about 307,000 cu. yds. sand and muck for laterals, may be seen at office of Engineering News, 220 Broadway, New York. Bids for the work are asked by E. C. Dearborn, Clk., County Comrs., until Sept. 5, as is stated in our advertising columns.

APPROACH WORK.—New York, N. Y.—Following bids were received by President of Richmond Borough for the approach work and grounds in connection with the Richmond Borough Hall: Louis Weehsler, 1135 Broadway, $51,000; Geo. A. Varney & Co., 156 5th Ave., $47,000; J. C. Vreeland Co., 1133 Broadway, $47,650; Bart Dunn, 66th St. and Ave. A, $44,936; Wm. Werner, 8921½ Forest Ave., $58,858.

CHIMNEY.—Erie, Pa.—Bids are asked by Water-Works Commissioners, George C. Gensheimer, Secy., until 3 p. m. Sept. 2 for construction of brick chimney 175 ft. high, 8 ft. internal diameter on foundation of present steel chimney at water-works pumping station. Alternate bids will be received on construction of a reinforced concrete chimney or a perforated radial brick chimney. Bids are also asked for taking down, section by section, the present 140 ft. steel smoke stack and 85 ft. of firebrick lining.

DREDGING, BULKHEADS.—Los Angeles, Cal.—The Naples Co. has awarded a contract to the ATLANTIC, GULF & PACIFIC CONSTRUCTION CO. for all the dredging and reinforced concrete bulkheads for the Parsons project at Alamitos Bay. The contract calls for the dredging of about 225,000 cu. yds. of dirt and the construction of over 13,000 lin. ft. of concrete bulkheads along the bay front. The bulkheads, which will be solid concrete, reinforced with steel girders, will average 13 ft. in height and will be 4 ft. thick at the base.

DRAINAGE WORK.—Storm Lake, Ia.—We are advised that Board of County Supervisors was to meet Aug. 15 to award contracts for ditching and other work for draining of surface water from agricultural lands. Bids for the work were taken some time ago, the official advertisement appearing in the Engineering News. The matter, however, was held in abeyance until recently, when the Supreme Court decided that the law under which funds were provided for the work was constitutional. E. D. Hoxsey is County Audr.

STONE WALL.—New York, N. Y.—Following bids per lin. ft. were received Aug. 10 by Park Board for furnishing labor and material for erecting Ohio sandstone wall on concrete foundation along Prospect Park West, Brooklyn: J. C. Redmond, Bronx, $16.45; North Eastern Construction Co., 23d St. and Broadway, $16.14; Bart Dunn, 68th St. and Ave. A, $16.42; Thos. O. C. Sloane, $18.90; Cooper & Evans, 21 Park Row, $15.88; R. E. Henningham, 4 Court Sq., Brooklyn, $17.32; Chas. Cranford, 38 Court St., Brooklyn, $14.45; P. J. Carlin, 1 Madison Ave., $14.98½; M. Bradley & Son, 277 Broadway, $15.44.

DERRICK, SCALE.—Washington, D. C.—Specifications may be seen at office of Engineering News, 220 Broadway, New York, for furnishing self-propelling derrick for naval station, Guantanamo, Cuba, and for furnishing 100-ton railroad and track scale for Navy Yard, Portsmouth, N. H. Bids for the derrick are asked by the Bureau Yards and Docks until Sept. 9, and for the scale until Aug. 26, as was stated in our last week's issue.

U. S. POSSESSIONS AND CUBA.

The names of parties awarded contracts are printed in capital letters.

WATER POWER DEVELOPMENT.—Porto Rico.—The Executive Council of the Island of Porto Rico, San Juan, Porto Rico, will receive bids until 10 a. m., Dec. 2, for a franchise or concession for the development of the water-power known as "Comerio Falls," situated on the La Plata River, about 17 miles from San Juan, and at an elevation of about 85 meters above sea level. It is estimated that about 1,000-HP. can be developed as a minimum. (Advertised, Engineering News.)

DREDGING.—Hawaii.—Contract for dredging Honolulu Harbor, bids opened July 20, at U. S. Engineers Office, is reported to have been let to SAN FRANCISCO BRIDGE CO., for $363,132.

RAILROAD.—Hawaii.—It is probable that a charter will be granted soon to the Koolau Ry. Co., to permit of the construction of railroad on this island.

FOREIGN CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

CEMENT.—Austria-Hungary.—Tenders will be opened Sept. 2 at the Municipal Offices, Vienna, for the supply of 320 tons of cement.

HARBOR WORKS.—Egypt.—Tenders will be received by Directeur General des Ports et Phares, a l'Arsenal, Alexandria, until noon, Oct. 10 for the construction of quays and jetties on the Gabbary shore at Mex. Drawings and specifications may be inspected at the office of the Chief Harbour Engineer, Alexandria.

WATER-WORKS SUPPLIES, ETC.—British India.—Tenders are asked by the Chairman, Municipal Board, Mussoorie, U. P., until Oct. 9 for supply and delivery of pipes, tees, crossplieces, reducers, bends, bends and collars, sluice valves and stop cocks, ball and non-return valves. Bids are asked until Oct. 23 for the electric lighting and water-works plant and material.

PIPING.—Peru.—Bids are asked by the Secretary of the Municipality of Callao, Peru, until 4 p. m., Oct. 5, for the supply of materials for the drainage works of that city. The quantities required comprise 33,980 lineal meters of earthenware straight tubing from 6-in. to 18-in. diameter, 4,818 meters branch tubing, and 656 straight cast-iron pipes for ventilation, 6 ft. long by 4-in. diameter, weighing 54 lbs. each. Further information can probably be obtained at office of Eduardo Higginson, Consul General to Peru, 19 Whitehall St., New York.

HARBOR WORKS.—Cape Colony. — The Commission of British Engineers appointed to report on the various plans for outer works at Algoa Bay recommend either of the following: A solid breakwater on the sea face 6,850 ft. in length, an inner quay 400 ft. by 300 ft., the widening of the inner portion of the Dom Pedro jetty, and the extension of the north pier to 7,650 ft., to be constructed at a cost of about $6,000,000; or, a south breakwater, 7,000 ft. in length, connected with the shore by a viaduct approach of 1,000 ft., and having reclamation at its inner end; the extension of the North Pier to 7,500 ft. in length, and of a new jetty of the mean length of 2,100 ft. and a width of 500 ft. This is estimated to cost about $16,000,000.

RAILWAYS.—South Australia.—From an authoritative source we learn that the questions of building railways in this country between the following points has been under consideration: Laura to Booleroo Centre, 24½ miles, 3 ft. 6-in. gage; Gawler to Angaston, 24¼ miles, 5 ft. 3-in. gage; northwards from Point Lincoln through Eyre's Peninsula, as far as the Head of Cummins, 43 miles, 3 ft. 6-in. gage. At the time of writing, June 22, it was impossible to say whether any of the project would be carried out. In addition we learn that there is at present under construction a 5 ft. 3-in. gage railway from Tailem Bend (75¼ miles from Adelaide) to Pinnaroo, a distance of [illegible]. The office of the Commissioner of Australian Railways is at Adelaide, South Aus.

RAILWAY.—Chile.—Palacios y Hermanos, Matta, 624, Santiago [illegible] us that surveys and plans are being made for a mining and nitre railway, to extend from the port of Mejillones to the Pampa Blanca, passing through the principal mining sections of the Province of Antofagarta. The road will be one hundred kilometers long, with a 2% grade. It is intended to move from [illegible] tons of freight each day. [illegible] steel cars are to be used. The capacity of car with capacity of 10 [illegible] of freight is to be used for [illegible]. Cars for animals, and for carrying inflammable substances, will be used as well as passenger cars and freight and locomotives. Wharves and piers will be constructed at Mejillones to facilitate loading and unloading. The piers and wharves will be equipped with modern machinery. Estimates for this to be based on handling 1,000 to 2,000 tons a day, [illegible] coal, coke, grain and feed, and nitre and salt in sacks, ores, building material. Elevated bins for coal and nitre will be built and equipped with machinery. Messrs. Palacios y Hermanos state they will be glad to receive [illegible] plans and estimates for equipping the piers with the most modern and economical machinery and will send particulars to manufacturers desiring them.

RAILWAYS.—Australia.—A correspondent in Melbourne, Victoria, sends the following information concerning railway work in that state: The State owned railway system of Victoria has now been extended to a length of 3,400 miles of line to serve an area of 87,884 square miles and a population of 1,250,000, which gives one mile of railway to each 26 square miles of area and [illegible] inhabitants. Further extensions are delayed by the desire to secure closer settlement with increased production by cultivation of land now used for sheep and cattle runs, along existing lines of railway, and also by the policy of the present Government which requires land owners benefited by new lines to make up by way of local rates any deficiency of revenue as balanced against working expenses and interest on capital cost. Seven extensions, varying from 4 to 10 miles in length are now being considered by the standing committee of the local parliament to which railway propositions are referred, and their recommendations are expected to be made during the session of parliament now about to commence. The better seasons now prevailing are encouraging settlement in the back country, which will demand railway facilities, especially in the wheat growing areas, as that staple has to be sold in the World's markets and the price does not allow long team cartage. An extension of about 130 miles long from Bairnsdale to the New South Wales border through rough country with numerous rivers to cross, which will sooner or later be needed to open up the Eastern Gippsland country, will require early consideration, if the decision of the commonwealth parliament in favor of placing the New Australian capital in the Southern corner of New South Wales, near the Victorian border, is acted on, as it would provide a direct railway route from Melbourne and the Western States. Two other border connections with New South Wales railways are held up at present, pending completion of agreements between the States; and a 2-ft. 6-in. gage railway, through very rough country to the mining township of Walhalla, is stopped within 16 miles of that place pending further legislation. The Parliamentary Standing Committee on Railways has under consideration a proposition to construct about 50 miles of State-owned tramways in the city of Melbourne to act as feeders to the present extensive suburban railways. The 44 miles of cable trams and four miles of horse trams already constructed in the city, and worked for the present by a private company, will become the property of the local municipalities in 1916, and, if not taken over at an earlier date, could then be electrified and worked in conjunction with the Government tramways and railways, and thus avoid profitless competition. In the meantime, the Government has just made a start with a short section of electric street railway, between the suburbs of St. Kilda and Brighton, three miles long, near the frontage of Port Phillip Bay, which it is expected will be extended to a length of five miles, and link up with suburban railways at each end—the gage being the same, viz.: 5 ft. 3-in. It is anticipated that the successful working of this section will popularize the electric system and expedite further construction. An electric street tramway through the suburbs of Essendon and Flemington, paralleling the railway on both sides, is just being started, under a concession, by Messrs. J. G. White & Co.; the total length when completed will be about eight miles. Maurice E. Kernot is Acting Engineer in Chief of the Railways Construction Branch of the Board of Lands and Works, Melbourne.

READERS' WANTS If any one is in the market for any engineering or contracting supplies, the first thing to do is to refer to our advertising pages, but if the buyer cannot find what he wants we particularly ask that he notify us at once and we will inform the proper parties without cost to the inquirer. A copy of **ENGINEERING NEWS BUYERS' GUIDE** will be mailed to any one upon application. This paper will always appreciate any news notes regarding public, or important private work, and will be pleased to receive detailed items. Requests to hold names will be complied with in every case. **Do not fail to write our advertisers or us.**

SAND LIME BRICK MACHINERY.—Moundsville, W. Va.—E. M. Lewis is reported as in the market.

CONTRACTORS' SUPPLIES.—Richmond, Va.—P. O. Box 632 is reported in the market for all kinds of contractors' supplies.

BRICK KILNS.—Idaho Falls, Idaho.—The Consolidated Wagon & Machine Co. is reported as in the market for steel brick kilns.

IRON BRIDGE.—Green County, Waynesburg, Pa.—Geo. D. Jenkins, C. E., Green, writes us that he is in a position to place an order for a 125 ft. iron span bridge.

STEEL RAILS, ETC.—Charlotte, N. C.—W. S. Lee, Jr., Ch. Engr., Southern Power Co., informs us that his company is in the market for sufficient new 60 lb. steel rails, with necessary angle irons, bolts, spikes and nut locks, to lay 10 miles of track. This material for immediate delivery, f. o. b. Fort Lawn, S. C.

EXCAVATOR.—Abbeville, S. C.—Frederick Minshall, Consult. Engr., informs us that he is in the market for a second-hand traction ditcher or excavator, to cut trenches about 30 ins. wide and up to 12 ft. deep.

PAVEMENT.—Knoxville, Tenn.—Ben Coulson, Louisville & Nashville Railroad, desires information regarding the cost, durability, etc., of wood block, bitulithic brick, asphalt and asphalt block pavement.

BUILDING SUPPLIES.—It is announced by an exchange that the following are in the market for building supplies of various kinds: W. W. Alfred, Arch., Box 261, Pensacola, Fla.; C. A. R. Enson, 319 No. Charles St., Baltimore, Md.; G. W. Long, of New Market, Tenn.; E. E. Robertson, of Collins, Miss.; J. M. Houck, of the Swannanoa Chemical Co., Marion, N. C.; D. L. Crouch, 26 Tucker St., Memphis, Tenn.; J. S. Starr, Rock Hill, S. C., etc.

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

*STOP COCKS, ETC.—Winnipeg, Man.—Bids were received July 31 by this city, C. J. Brown, Cy. Clk., for furnishing stop-cocks and corporation cocks the contract being awarded Aug. 7 to CANADA BRASS & SUPPLY CO., London, Ont., at the following bid: 2,500 ½-in. stop cocks, 65 cts.; 250 ¾-in. stop cocks, 80 cts.; 450 ¾-in. stop cocks, $1; 150 1-in. stop cocks, $1.15; 600 ½ × ½ × ¾ double stop cocks, $1.10; 500 ½ × ½ × ¾ double stop cocks, $1.25; 1,500 ½-in. corporation cocks for lead pipe, 37½ cts.; 500 ¾-in. corporation cocks for lead pipe, 52½ cts.; 200 ¾-in. corporation cocks for lead pipe, 62½ cts.; total, $4,0[illegible]

*BRIDGE WORK.—New York, N. Y.—Following bids were received Aug 10 by George E. Best, Comr. Bridges, for furnishing metal work for anchorages and constructing towers, cables, suspenders and suspended superstructure of the Manhattan Bridge over the East River; (1) Pennsylvania Steel Co., 71 Broadway, New York; (2) John Peirce Co., 277 Broadway, New York; (3) R. H. Hood Co., 289 Broadway, New York; (4) Milliken Bros., 11 Broadway, New York; (5) The King Bridge Co., 277 Broadway, New York; R. H. Hood Co. bid 10 cts. per lb. for furnishing 119,100 lbs. pins, bolts, nuts, etc., for the towers, and 30,200 lbs. structural steel for tower work:

BIDS RECEIVED AT NEW YORK, N. Y., AUGUST 10, 1905, BY GEORGE E. BEST, COMMISSIONER OF BRIDGES, FOR FURNISHING METAL WORK FOR ANCHORAGES AND CONSTRUCTING TOWERS, CABLES, SUSPENDERS AND SUSPENDED SUPERSTRUCTURE OF THE MANHATTAN BRIDGE OVER THE EAST RIVER.

	(1)		(2)		(3)		(4)		(5)	
Anchorage material:	Quantity.	Unit Price.	Quantity.	Unit Price.	Quantity.	Unit Price.	Quantity.	Unit price.	Quantity.	Unit Price.
Riveted work	1,335,600 lbs.	4.22 cts.	1,300,000 lbs.	5.95 cts.	1,335,600 lbs.	6.0 cts.	1,355,800 lbs.	4.94 cts.	1,325,000 lbs.	5.9 cts.
Eye-bars	3,731,900	4.55	3,750,000	5.95	3,731,900	6.0	3,945,200	5.2	3,724,000	5.2
Pins	307,500	8.48	305,000	5.95	307,500	10.0	317,600	13.85	308,000	7.0
Steel castings	1,500	6.5	2,000	4.0	1,500	10.0	1,500	8.81	1,500	8.0
Bronze	400	40.0	400	25.0	400	50.0	400	39.5	500	40.0
Iron castings	18,500	4.5	20,000	4.0	18,500	6.0	85,600	5.94	1,800	6.5
Towers:										
Riveted work, including architectural metal work	21,452,900 lbs.	7.24 cts.	21,420,000 lbs.	8.5 cts.	21,333,800 lbs.	9.0 cts.	23,889,700 lbs.	8.06 cts.	21,436,000 lbs.	12.5 cts.
Steel castings	3,385,200	9.32	3,385,000	8.3	3,385,200	7.0	3,406,900	8.08	3,670,000	8.0
Iron castings	189,100	13.43	189,100	6.0	189,600	6.0	188,900	6.75	250,000	12.0
Concrete, mortar, etc.	930 c.ys.	$15.50	1,000 c.ys.	$8.00	930 c.ys.	$10.00	930 c.ys.	$7.71	930 c.ys.	$12.00
Lead for bedding base castings	20,600 lbs.	8.3 cts.	20,600 lbs.	8.2 cts.	20,600 lbs.	10.0 cts.	21,000 lbs.	10.12 cts.	21,000 lbs.	10.0 cts.
Cables, suspenders, etc.:										
Cables	12,657,500 lbs.	14.6 cts.	13,120,000 lbs.	12.0 cts.	12,176,200 lbs	15.0 cts.	13,015,576 lbs.	15.02 cts.	13,015,600 lbs.	15.5 cts.
Suspenders, hand ropes, etc.	1,240,000	17.19	1,220,000	18.0	1,153,600	12.0	1,530,304	17.33	1,530,300	18.0
Steel castings, including cable bands, strand shoes, anchorage saddles, rollers, etc.	2,061,000	12.47	1,830,000	8.5	1,744,600	10.0	2,120,192	14.6	2,210,000	13.0
Iron castings	42,000	8.50	55,000	6.12	54,500	6.0	88,100	12.26	72,200	16.0
Pins, bolts, nuts, etc.	91,000	11.00	383,000	9.34	383,000	10.0	96,000	18.38	96,000	18.0
Bronze	12,300	91.35	12,000	25.0	12,000	50.0	15,680	62.48	15,700	60.0
Zinc for suspender sockets	25,000	13.68	26,000	25.0	25,200	20.0	24,722	17.3	24,700	17.0
Lead fillers	7,000	11.0	8,000	8.2	7,400	10.0	6,500	116.0	650	110.0
Suspended superstructure:										
Nickel steel or high carbon steel riveted work	16,247,400 lbs.	8.78 cts.	16,400,000 lbs.	9.0 cts.	16,247,400 lbs.	8.5 cts.	19,659,800 lbs.	8.006 cts.	16,250,000 lbs.	10.0 cts.
Medium carbon steel riveted work	21,049,800	6.11	21,100,000	7.14	21,049,800	8.5	18,820,500	6.764	20,300,000	8.2
Steel castings	41,900	8.69	120,000	5.43	41,900	10.0	42,900	9.48	133,000	10.0
Iron castings	32,200	5.9	32,200	5.43	32,200	7.0	33,000	8.5	94,000	8.0
Pins	32,600	8.7	32,600	7.53	32,600	10.0	32,800	15.36	47,000	9.0
Bronze	6,300	41.4	6,300	25.0	6,300	50.0	6,400	35.14	9,000	40.0
	Net Tons.		Net Tons.		Net Tons.		Net Tons.		Net Tons.	
Inspection (unit price per ton)	42,047	$1.20	42,100	$1.20	41,685	$1.20	44,343	$1.20	42,282	$1.20
Totals		$7,284,739		$7,486,491		$7,956,712		$7,983,970		$9,312,940

*DALLES-CELILO CANAL. — Portland, Ore.—Bids were received July 24, at U. S. Engineer's Office for construction of portion of the Dalles-Celilo Canal, in connection with the work of improving Columbia River at Three Mile Rapids, Oregon and Washington. The bids were taken on four designs, as follows: Design A, contemplates using reinforced concrete for a portion of river and land wall's, and plain concrete for remaining work; Design C contemplates using plain concrete for entire work; Rubble Design contemplates using rubble masonry for river and land walls (increasing section where necessary) in Design C, and using plain concrete for remaining work; Contractors' Design allows contractors to submit a special design for reinforced concrete walls in Design A. The Burrell Construction Co. was the only contractor to offer a bid on the last method, the company submitting a bid of $12 per cu. yd. for the 13,000 cu. yds. of plain concrete and $13 per cu. yd. for the 9,800 cu. yds. reinforced concrete required under this design. The company offered to furnish the 950,000 lbs. reinforcing rods required under the design at 6 cts. per lb., their total bid for all the work under Contractors' Design amounting to $555,288. Approximate sum of $375,000 is available for the work. The bidders, the brand of cement to be used, and data regarding prosecution of the work were as follows, (1) International Contract Co., Seattle, Wash.; California; suspends work when funds are exhausted; (2) John Kiernan, Portland, Ore.; Portland, any brand; will finish work on time; (3) Burrell Construction Co., Portland, Ore.; K. B. & S., Condor or Alsen, according to approval of engineer; suspends work when funds are exhausted; (4) Joseph Paquet & Anton Giebisch, Portland, Ore.; Portland, any brand; suspends work when funds are exhausted; (5) J. W. Sweeney, Portland, Ore.; Alsen, N. Condor, Germania; carry on work continuously; (6) Robt. Wakefield, Portland, Ore.; Josson, Dragon, Alsen, Golden, N. Condor, any of above; constant work, continuously; (7) Prendergast & Clarkson, Chicago, Ill.; North Condor or equal; continuous work; (8) Smyth & Jones, Portland, Ore.; Germania, Dragon, Josson, Condor, Teutonia; suspend work on July 1, 1906 if Congress fails to make appropriation; (9) Pacific Coast Construction Co., Portland, Ore.; North Condor or equal; suspend work when funds are exhausted; (10) Puget Sound Bridge & Dredging Co., Seattle, Wash.; Germania, Condor, etc., satisfactory to engineer; prosecute continuously until completed:

BIDS RECEIVED JULY 24, 1905, AT PORTLAND, ORE., FOR EXCAVATION, CONCRETE, MASONRY WORK, ETC., FOR CONSTRUCTION OF PORTION OF THE DALLES-CELILO CANAL.

Items.	Quantities.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Concrete, plain, Design A	13,000 cu. yds.	$8.10	$7.40	$12.00	$6.50	$7.50	$8.50	$7.47	$5.60	$6.50	$0.40
Concrete, plain, Design C	33,000 "	8.10	6.71	12.00	6.50	7.00	6.90	7.45	5.33	6.50	6.15
Concrete, plain, Rubble Design	10,000 "	....	6.71	12.00	6.50	7.00	....	7.45	5.33	6.50	....
Reinforced concrete, Design A	9,800 "	11.25	9.90	13.00	8.50	8.00	9.75	8.25	8.20	12.50	7.30
Rubble masonry, Rubble Design	27,000 "	....	5.80	18.00	8.50	7.00	....	6.45	7.50	10.00	....
Excavation, solid rock	81,000 "	1.50	.89	2.00	.90	1.50	.94	.98	.90	1.00	1.30
Excavation, sand	12,000 "	.55	.39	.50	.20	.40	.20	.18	.18½	.25	.35
Excavation, common	43,000 "	.55	.47	.40	.50	.50	.38	.60	.37	.50	.40
Riprap, hand placed	9,000 "	2.50	2.50	3.00	2.00	2.00	2.25	1.95	1.85	2.00	2.85
Timber, oak	100 ft. B. M.	70.00	125.00	130.00	130.00	100.00	100.00	100.00	87.00	100.00	100.00
Timber, fir	1,500 "	40.00	35.00	30.00	40.00	40.00	24.00	40.00	37.00	35.00	40.00
Test and anchor holes	200 lin. ft.	2.00	2.00	.25	.75	2.00	.40	1.00	2.50	1.00	.90
Structural steel shapes	3,000 lbs.	.10	.25	.07	.25	.05	.10	.08¾	.12½	.06	.15
Reinforcing rods (medium steel), Design A	950,000 "	.03 11/100	.03¼	.05	.05	.02½	.03	.05½	.03 1/100	.03¼	.03 13/100
Reinforcing rods (medium steel), Design C	105,000 "	.03 11/100	.03¼	.05	.05	.02½	.03	.05½	.03 1/100	.03¼	.03 13/100
Reinforcing rods (medium steel), Rubble Design	105,000 "	....	.03¼	.05	.05	.02½	....	.05½	.03 1/100	.03¼	....
Cast iron	2,000 "	.05	.10	.06	.25	.05	.10	.04	.12½	.06	.20
Roller valves, complete	2	250.00	2,500.00	100.00	2,500.00	2,000.00	900.00	1,600.00	2,400.00	2,200.00	1,800.00
Asphaltic cement	27 tons	40.00	40.00	50.00	25.00	50.00	30.00	25.00	50.00	40.00	80.00
Drain tile	1,000 lin. ft.	.15	.10	.70	.25	.20	.15	.60	.15	.15	.25
Totals, Design A		$426,122	$351,170	$545,788	$337,498	$371,720	$353,066	$359 920	$297,304	$367.567	$343,840
" Design C		447,874	351,917	616,138	341,948	405,695	349,366	381,595	294,262	347,665	365,686
" Rubble Design		.....	354.187	826,138	421,948	433,695	.....	384,395	374,172	468,105	.....

STORM SEWER.—Columbus, O.—Following bids were received Aug. 4 by Department Public Service, Julian Griggs, Ch. Engr., for the construction of Renick Run storm sewer and a portion of the West Side sanitary sewer; (1) WESTWATER & CASEY, Columbus, O. (awarded contract); (2) Burkhardt & Lehman, Cleveland, O.; (3) C. T. McCracken & Co., Columbus, O.; (4) Murphy, Miles & Sullivan, Columbus, O.; (5) M. O'Herron & Co., Pittsburg, Pa.; (6) Cooke, Grant & Fritz Bros., Columbus, O.:

	(1)	(2)	(3)	(4)	(5)	(6)
23,000 cu. yds. excavation	$0.83	$0.55	$0.67	$0.59	$1.00	$0.85
6,000 cu. yds. concrete	6.10	7.15	6.74	7.25	6.00	7.25
2 cu. yds. brick masonry	15.00	14.00	15.00	12.00	18.00	13.00
25 lin. ft. 15-in. vit sewer pipe	.50	1.50	1.00	.50	2.00	.55
40 cu. yds. broken stone-gravel	1.00	1.25	1.50	1.00	2.00	1.25
15 cu. yds. dry stone paving	3.00	6.00	3.00	5.00	6.00	3.05
12,000 lbs. misc. iron work	.04	.0475	.05	.05	.05	.05
Total	$60,455	$60,945	$61,056	$62,525	$64,056	$68,645

*PAVING.—Auburn, N. Y.—Bids were received Aug. 7 by this city, J. Walter Ackerman, Cy. Engr., for paving Clark St., the contract being awarded to BRAYER BROS., Auburn, N. Y., at the following bid: 11,000 sq. yds. bitulithic, $2.12; 280 sq. yds. Mack block, $2.50; 6,400 lin. ft., Auburn grey lime curbing, set, 76 cts.; 730 lin. ft., protection curbing, set, 45 cts.; 19 catch-basins, connected with sewer, $45; 15,000 sq. ft. sidewalk to be laid, 3 cts.; 240 lin. ft., 12-in. surface water sewer, $1; 11,000 sq. yds. extra excavation, excavated material to be property of city and to be delivered by contractor within a radius of 3,000 ft., 15 cts.; total, $33,709.

BRIDGE, DAM, ETC.—Boston, Mass.—Contract for building Boyleston St. bridge and approaches, and masonry dam, Charles River Reservation (bids received Aug. 7 by Metropolitan Park Commission, J. R. Rablin, Ch. Engr.), has been awarded to M. McDONOUGH, Swampscott, Mass., at the following bids: 3,300 cu. yd. earth grading, 90 cts.; 330 cu. yds. rock grading, $4; 1,000 cu. yds. concrete masonry, $6.50; 500 cu. yds. stone masonry, $14; reinforced concrete arch, 50 ft. span, $3,980; plain concrete arch, 14 ft. span, $720; 305 lin. ft. stone coping (parapet), $1.80; 85 lin. ft. stone coping (dam), $2.20; 330 lin. ft., edgestone, $1.10; 12 cu. yds. brick masonry, $15; 110 lin. ft., 10-in. pipe drain, $1; 850 sq. yds. broken stone surfacing, 50 cts; 600 sq. yds. gravel surfacing, 40 cts.; 300 cu. yds. loam surfacing, $1.50; 550 sq. yds. walk surfacing, 40 cts.; special work—sluice gates, $250; total, $25,464.

DREDGING. — Savannah, Ga. — Following bids were received Aug. 2 by Lt. Col. James B. Quinn, U. S. Engrs., for dredging Skidaway Narrows, Ga., 110,000 cu. yds.: Simons-Mayrant Co., Charleston, S. C., 20.9 cts.; Southern Dredging Co., Mobile, Ala., 25 cts.; George W. Catt, New York, 26.9 cts.; P. Sanford Ross, Inc., Jersey City, N. J., 30 cts.; Wayne Cunningham, Savannah, Ga., 14½ cts.

*SEWERS.—Phillipsburg, N. J.—Bids were received Aug. 5 by Sewer Commission, Robert P. Howell, Town Surv., for constructing sewers, the contract being let to WILKES-BARRE CONSTRUCTION CO., Wilkesbarre, Pa., for a total of $6,607, their itemized bid on the McKeen St. sewer being as follows: 18-in. pipe sewer, 810 ft., $1.43; 12-in. pipe sewer, 420 ft., 94 cts.; 10-in. pipe sewer, 1,130 ft., $1; 8-in. pipe sewer, 1,730 ft., 86 cts.; 18-in. Y branches, 12, $1.31; 12-in. Y branches, 12, 82 cts.; 10-in. Y branches, 70, 65 cts.; 8-in. Y branches, 110, 45 cts.; rock, cu. yds. 100, 50 cts.; concrete, cu. yds., 4, 88; manhole, 140 vert. ft., $3; catch-basin, 13, $40; total, $5,313.

*CONCRETE BRIDGE.—Bridgeport, Conn.—Following bids were received Aug. 10 by E. T. Buckingham, Cy. Clk., for building bridge over Ash Creek between Bridgeport and Fairfield, Conn.; W. W. Starr, Cy. Surv.; (1) earth fill per cu. yd.; (2) rip-rap per cu. yd.; (3) material removed per cu. yd.; (4) railing per lin. ft.; (5) macadam roadway per sq. yd.; (6) construction of bridge proper:

	(1)	(2)	(3)	(4)	(5)	(6)
Standish Stone Corp., Bridgeport, Conn.	$0.70	$2.00	$0.65	$0.25	$0.65	$12,000
Tucker & Vinton, New York	.82½	2.00	1.25	.50	2.00	23,000
Bell Engineering & Const. Co., New York	.60	1.00	.35	.40	.90	29,768
Abbott-Gamble Co., New York	.50	1.00	1.00	.50	.65	15,800
Russell Construction Co., New York	.87	2.50	.75	.25	.74	11,475
J. E. Fitzgerald Co., New London, Conn.	.65	2.10	2.00	.30	1.00	14,617
Bunting Construction Co., New York	.67	1.50	.35	1.00	1.25	10,325
Crouse Construction Co., Perth Amboy, N. J.	.83	1.50	1.00	.40	73	12,748
John Franzelli, So. Norwalk, Conn.	.78	2.35	1.50	.43	.60	11,600
F. Wardwell, Stamford, Conn.	.75	2.25	1.00	.50	.65	11,500
Miller Collins Co., New York	.79½	1.05	.70	.50	.80	14,492
Frank Pidgeon, Saugerties, N. Y.	.80	2.00	2.00	3.00	2.00	34,550
Jeremiah Finch, Glen Falls, N. Y.	.66¾	1.75	.66¾	.18	.65	14,419
Middlesex Const. Co., New Brunswick, N. J.	.48	2.25	.35	.25	.60	12,442

OILING STREETS.—San Francisco, Cal.—We are informed that this city is about to apply oil to its macadamized streets and has let a contract to C. S. HARNEY for the preparation and oiling of Fulton St., from First Ave. to Twelfth Ave. The prices were: For furnishing and spreading rock, including macadam screenings, $1.69 per cu. yd.; for furnishing and spreading oil in street surface, including regrading, 14¾ cts. per sq. yd.

CIVIL SERVICE EXAMINATIONS

LEVELER, TRACER.—The New York State Civil Service Commission, Charles S. Fowler, Chief Examiner, Albany, N. Y., from whom application forms and detailed information may be obtained, will hold an examination Sept. 9 for the following positions: Leveler, State Engineer's Department, at $4.50 to $5 per day; tracer, State Engineer's and State Architect's Offices, at $30 to $50 a month.

DRAFTSMAN.—U. S. Civil Service Commission, Washington, D. C., from which further information can be obtained, will hold an examination Sept. 12-14 to secure eligibles to fill a vacancy in the position of architectural and structural draftsman, at $1,500 per year, in the Quartermaster's Department at Large, Washington, D. C., and vacancies as they may occur in any branch of the service requiring similar qualifications.

INDUSTRIAL NOTES.

THE CANADIAN WHITE CO., LTD., has been formed, with headquarters in the Sovereign Bank Bldg., Montreal, Que., by the J. G. White Co., of 43 Exchange Pl., New York.

THE WELLMAN-SEAVER-MORGAN CO., Cleveland, has established a branch office at 216 Dooly Block, Salt Lake City. Mr. Harry V. Croll, M. E., has been appointed manager of same.

THE KANSAS CITY CONTRACTORS' SUPPLY CO., Sta. A., Kansas City, Mo., has been organized, with K. L. Browne as President; Edward Fenlon, vice-President; and E. N. Browne, Secy. and Treas.

THE IRON CITY STEEL CO., Bessemer Bldg., Pittsburg, has been organized to deal in new and relaying rails and other iron and steel products. H. B. Jewkes, formerly manager of the rail business, of Hyde Bros. & Co., is the organizer.

THE BARNEY & SMITH CAR CO., of Dayton, O., announces that it is not included in the recent combination of builders of street railway cars. This company builds passenger and freight cars of all kinds, and street railway cars form only a part of its business.

THE PELTON WATER WHEEL CO., San Francisco, reports new orders as follows: Homestake Mining Co., Lead, So. Dak., 800 HP. Pelton wheel unit direct connected to an electric generator. The Nevada Power Mining & Milling Co. has closed for an additional Pelton wheel of 3,000 HP. maximum capacity, the wheel being direct-connected to an electric generator and operating under a head of 990 ft. The company is now in-

stalling two Pelton wheels for direct connection to 750 KW. generators and proposes to transmit power to Tonopah and Goldfield, Nev. Through Mitsui & Co., San Francisco, was placed an order for 500 HP. wheel for use in electric light station in Japan.

THE MIDLAND STEEL CO., Pittsburgh, which is to erect a large blast furnace plant at Midland, Pa., has placed contract with Wm. B. Scaife & Sons Co., Pittsburgh, for six steel frame buildings, also crane-runways, etc. A very large tonnage of structural shapes and plates will be required in this connection.

THE MUNICIPAL ENGINEERING & CONTRACTING CO., Railway Exchange, Chicago, Ill., has at work on a government dam near Louisa, Ky., what it states are two of the largest power concrete mixers in the world. They are center driven cube mixers, with automatic dumping devices. Each mixer holds 64 cu. ft. and will turn out 800 cu. yds. of concrete in ten hours. The mixers at the Louisa dam are being used by the Baker Contract Co., of Pittsburg. This type of mixers was described, with illustrations, in Engineering News of June 5, 1902.

TRADE PUBLICATIONS.

CORLISS ENGINES.—Quincy Engine Works, Quincy, Ill. 6 × 9 ins.; pp. 8.

The Quincy heavy duty Corliss engine is shown in this catalogue, and tables are given of its horse-power, etc.

EXPANDED STEEL LATH.—The General Fireproofing Co., Youngstown, O. Illustrated folder; 9 × 4 ins.; pp. 12.

"Herringbone" expanded steel lath is listed in this folder.

WHITE LEAD.—Picher Lead Company, Chicago and New York. 3¼ × 6 ins.; pp. 16.

The manufacture of, and the merits of, sublimated white lead are described in this pamphlet.

WATER-TUBE BOILERS.—Atlas Engine Works, Indianapolis, Ind. Stiff paper; 9¼ × 6¼ ins.; pp. 40.

This catalogue describes the Atlas water-tube boiler and its characteristic features.

FLANGES.—American Forged Steel Flange Co., 64 Wabash Ave., Chicago, Ill. Card; 6½ × 3½ ins. Also folder; 6 × 8½ ins.; pp. 4.

Price-lists of different sizes of steel boiler flanges are contained in these folders.

INTER-POLE VARIABLE SPEED MOTORS.—Electro-Dynamic Co., Bayonne, N. J. 6 × 9½ ins.; pp. 16.

Dimensions and capacities of the various motors made by this company are given, and the important features described.

WINDMILLS.—Flint & Walling Mfg. Co., Kendallville, Ind. 3½ × 6¼ ins.; pp. 12. Also, illustrated folder, 3¼ × 6¼ ins.; pp. 6.

The merits of the "Star" windmill are set forth in this folder.

LOCOMOTIVE CRANES.—The Browning Engineering Co., Cleveland, O. 6 × 9 ins.; pp. 26.

This bulletin consists entirely of illustrations of the Browning locomotive crane at work in various places.

DUMP WAGONS AND ELEVATING GRADERS.—National Drill & Mfg. Co., New York and Chicago. Illustrated folder; 5½ × 3 ins.; pp. 6.

The "National" dump wagon and elevating grader are illustrated in this folder.

DRILLING MACHINERY.—The Edward Christman Co., Massillon, O. Stiff paper; 9 × 6 ins.; pp. 22.

This catalogue consists of photographs of the well drilling machines made by this company.

MACHINISTS' TOOLS.—Brown & Sharpe Mfg. Co., Providence, R. I. 6 × 9 ins.; pp. 5.

Descriptions and price lists are given, of micrometers, caliber sets, improved steel beam trammels, universal dividers, B. & S. scribers, knife-edge straight-edges, etc.

REINFORCED CONCRETE CONSTRUCTION.—Cummings Structural Concrete Co., Pittsburg, Pa. Illustrated folder; 5½ × 7 ins.; pp. 8.

The Cummings system of concrete reinforcement is briefly illustrated and described in this folder.

INDICATORS.—The Ashcroft Mfg. Co., 85 Liberty St., New York. 6 × 9 ins.; pp. 32.

The Tabor steam indicator is shown in a great variety of styles, prices being given. Planimeters for measuring areas are also listed.

MECHANICAL OIL PUMPS.—The Lunkenheimer Co., Cincinnati, O. 3½ × 6¼ ins.; pp. 10.

The uses to which the Lunkenheimer mechanical oil pump can be put are set forth, and letters of recommendation are given.

MINING AND SCREENING MACHINERY.—The Jeffrey Mfg. Co., Columbus, O. 6 × 9 ins.; pp. 24. Also, illustrated folder, 6 × 3¼ ins.; pp. 6.

This catalogue is devoted almost entirely to the illustration of different sizes and types of rotary screens.

GRINDING AND POLISHING MACHINERY.—Builders Iron Foundry, Providence, R. I. Illustrated folder, 3½ × 6 ins.; pp. 6.

STEAM METERS.—Sargent Steam Meter Co., Chicago, Ill. 3½ × 6¼ ins.; pp. 16.

The Sargent steam meter is an instrument for indicating the pounds of steam flowing, irrespective of pressure. The design of the meter is illustrated and the principle of its operation described.

CEMENT SEWER PIPE MOLDS.—Miracle Pressed Stone Co., Minneapolis, Minn. 9½ × 12 ins.; pp. 11.

This catalogue illustrates and describes the making of cement pipes, molds for which are furnished by this company. Estimates of the cost of making cement pipe are given.

METAL BUILDING MATERIALS.—American Sheet & Tin Plate Co., Pittsburg, Pa. 7½ × 5 ins.; pp. 40.

Corrugated sheets plain and curved, ridge rolls plain and corrugated, metal roofing of many kinds, imitation brick and rock face siding, metal lath, eaves-troughs, galvanized conductor pipes, etc., are listed.

STONE-CRUSHING MACHINERY.—Julian Scholl & Co., 126 Liberty St., New York. Stiff paper; 8 × 10½ ins.; pp. 24.

The "Reliance" steel stone crusher is very fully illustrated. Photographs show the machine at work under various conditions. Portable bins on wheels are also illustrated and described.

RECORDING THERMOMETERS.—The Bristol Co., Waterbury, Conn. Stiff paper; 9 × 12 ins.; pp. 48.

The Bristol recording thermometer is used for a great variety of purposes, as illustrated in this catalogue, and facsimiles of record charts are given. Special recording thermometers are made for high temperatures, up to 1,200° F., for use in kilns, ovens, etc.

MEDIUM-SPEED ENGINES.—Atlas Engine Works, Indianapolis, Ind. Stiff paper; 9¼ × 6¼ ins.; pp. 80.

Several different types of Atlas engines, including center crank and side crank patterns, in four-valve automatic, single-valve automatic and throttling engines are illustrated and described in these pages, tables being given of dimensions, horse power, etc.

STEEL PILING.—Friestedt Interlocking Channel Bar Co., Chicago, Ill. Stiff paper; 6¼ × 9¼ ins.; pp. 64.

The Friestedt interlocking channel bar is illustrated in all its details, and the method of driving the sheet piling is shown by numerous photographs. The piling is particularly adapted for coffer dam work, and is also used for many other purposes.

CONCRETE MIXERS.—Municipal Engineering & Contracting Co., Railway Exchange, Chicago, Ill. Stiff paper; 6 × 9 ins.; pp. 31.

This interesting pamphlet discusses the methods of making concrete, gives tables of quantities of cement, sand and stone required per cubic yard, and valuable cost data. The merits of the Chicago improved cube concrete mixer are fully set forth.

MINING MACHINERY.—The Wellman-Seaver-Morgan Co., Cleveland, O. 6 × 9 ins.; pp. 39.

This catalogue is devoted principally to illustrating mine cages, skips and ore cars, of various sizes and types. Safety hooks are also described. Revolving tipples, or cradles, for dumping cars of different sizes, are shown. A special water skip for hoisting water is illustrated.

PAVEMENT LIGHTS AND FLOOR LIGHTS.—American Bar-Lock Co., 26th St. and Pennsylvania Ave., Philadelphia, Pa. 8 × 11 ins.; pp. 12.

The bar-lock and three point prism construction for floor lights, skylights and pavement lights is well illustrated in this catalogue. Photographs and line cuts show the design of the lights, and a partial list of buildings in which these lights have been used is given.

EXPANSION BOLTS AND SHIELDS.—Diamond Expansion Bolt Co., 9 Murray St., New York. 6 × 9 ins.; pp. 14.

Expansion shields, for use with lag screws, are listed in this catalogue, and suggestions are made as to the different uses to which this device can be put; as, for example, for providing supports for cables in brick or concrete subways, and the like. In general, the device is useful in providing supports for any weight to be carried by stone, concrete or brick walls.

WOOD AND STEEL SHEET PILING.—H. Wittekind Interlocking Sheet Piling Co., 28 E. Jackson Boulevard, Chicago. Paper; 4½ × 6½ ins.; pp. 11; illustrated.

The timber sheet piling is made with three thicknesses of plank, and two dovetail strips to form the interlocking feature. In the steel piles the web is a plate, with a Z bar riveted along one edge an an angle along the other edge, forming a groove for the flange of the Z-bar of the next pile.

TIN PLATE ROOFING.—American Sheet & Tin Plate Co., Pittsburg, Pa. 7½ × 5 ins.; pp. 62.

This catalogue describes the mining of iron ore, smelting, rolling and detailed production of sheet tin. It also describes the making of a tin roof.

AIR AND GAS COMPRESSORS.—Worthington Pump Co., Ltd., London, E. C., England. 6 × 9 ins.; pp. 175.

Air compressors of different types and sizes are listed and illustrated. Useful tabular information is given as to the flow of compressed air in pipes, the air required for rock drills, pumps, etc.

ELECTRIC CRANES.—Pawling & Harnischfeger, Milwaukee, Wis. Boards; 12 × 9 ins.; pp. 139.

Electric traveling cranes, for use in foundries, machine shops, etc., are very fully illustrated by photographs of numerous installations. A long list of users of these cranes is given. An interesting type of crane is an electric yard crane, consisting of an electric trolley car traveling suspended from an I-beam track on which it travels.

FROGS AND SWITCHES.—Elliot Frog & Switch Co., East St. Louis, Ill. Cloth, oblong; 6¾ × 4 ins.; pp. 151; illustrated.

A variety of frogs and switches are illustrated, including a yard switch with movable wings thrown by the wheels and remaining set for one track until a train on the other track shifts it. Expansion joints, wrecking frogs, track tools and special work for street-railway track are included, and there are several pages of diagrams of turnouts, tables of switch timbers, and similar information.

ORE AND COAL HANDLING MACHINERY.—The Wellman-Seaver-Morgan Co., Cleveland, O. Stiff paper; 9 × 12 ins.; pp. 103.

In this catalogue are illustrated and briefly described the Hulett automatic ore unloaders, ore stocking and rehandling bridges, traveling cranes and automatic buckets, car dumpers, locomotive cranes, Hulett excavating buckets, Dole drag buckets, orange-peel buckets, and many other machines for loading, conveying and unloading materials.

MARINE GAS ENGINES.—Hercules Gas Engine Works, 215 Bay Street, San Francisco, Cal. Paper, oblong; 9 × 7½ ins.; illustrated.

The Hercules four-cycle engine is described, but the special feature of interest in this pamphlet is the description of the use of these engines as auxiliary power on trading schooners, in order to save the expense of towing in harbor. The power can also be used for hoists to handle the sails, anchor and cargo. Several of these vessels are illustrated, as well as yachts, launches and a twin-screw freight barge.

STEEL SHEET PILING.—The Interlocking Steel Sheeting Co., 1102 Ashland Block, Chicago. Paper; 6 × 9 ins.; pp. 40; illustrated.

In this system every other pile is a plain I-beam, and the alternate piles are pairs of steel channels riveted together free to fall, with just room between the flanges to admit the web of the I-beam, whose flange lies within the hollow pile. This piling was used for the two cofferdams for the abutment piers of the Randolph St. bascule bridge over the Chicago River. Various proposed applications of the piling to shaft, dock and foundation work are shown.

MANILA ROPE.—C. W. Hunt Co., West New Brighton, N. Y. 6½ × 9¼ ins.; pp. 47.

The manufacture of manila rope is illustrated and described. Tables and diagrams are given, for use in computing the horse power transmitted by rope drives. Diagrams show the use of manila rope in rope driving, drawings illustrate methods of splicing rope, and the different knots, hitches and bends are also illustrated. The strength of manila rope and working loads are given, the data being abstracted from a paper in the Transactions of the American Society of Mechanical Engineers.

TRACTION ENGINES.—The Best Mfg. Co., San Leandro, Cal. Paper, oblong; 7 × 5 ins.; pp. 34; illustrated.

These engines are peculiar in design, having a tee-shaped (a combination vertical and horizontal) boiler, a pair of 8-ft. driving wheels, and a single leading wheel carried in a pivoted frame for steering. The pamphlet consists mainly of half tone views showing these engines hauling lumber, ore and freight in wagons; and also hauling gangs of plows, and attached to large reaping and threshing machines. Two views show a machine at work in swamp land, where a wooden wheel or roller 9 ft. diameter and 16 ft. long is required on each side to prevent the machine from sinking into the soft ground.

For other Proposal Advertisements see pages 43, 44, 45, 16, 17, 18, of Advertisements and Construction News page 58.

CONDUIT, WATER PIPE AND LAYING.

Office of Superintendent of Water-Works, Room 3, City Hall, Richmond, Va., August 15th, 1905.

Sealed proposals for the following work will be received at this office until P. M., Sept. 5th, 1905, as follows:

1. For the construction of steel reinforced concrete conduit about one mile long and five (5) feet internal diameter and pipe connections with same.

2. For furnishing thirty-six (36) or forty-two (42) inch cast iron pipe about one mile long and connections therewith, specials and valves.

3. For laying and calking thirty-six (36) or forty-two (42) inch pipe, and for all trenching, refilling and rip-rapping pertaining to this work, about one mile long.

The right to reject any or all bids is reserved by the Committee on Water.

Plans, specifications and information on application to this office.

CHAS. E. BOLLING,
7-3t Superintendent.

IMPROVEMENTS TO WATER SUPPLY.

Department of Public Works,
Bureau of Filtration,
Office, Room 412 City Hall,
Philadelphia, August 14, 1905.

Sealed proposals, endorsed "Bids for Improvement, Extension and Filtration of the Water Supply," and addressed to the undersigned, at the office above mentioned, will be received until 12 o'clock noon on Wednesday, September 6, 1905, for Contract No. 51: Filtering Materials and Collectors for the Torresdale Filters.

Copies of Specifications, Drawings and Blank Forms of Proposals for the above work can be obtained at Room 712, City Hall, under the regulations of the Bureau.

No bids will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance requiring proposal bonds when the bids exceed in amount five hundred dollars, approved May 25, 1860 (p. 81, West), have been complied with.

The Director reserves to himself the right to reject any or all bids, as he may deem best for the interests of the city.

A. LINCOLN ACKER,
7-3t Director.

SITUATIONS OPEN

TECHNICAL STENOGRAPHER wanted by a railroad company. Address "E. H. F." c/o Engineering News, New York. 7-1t

WANTED.—Five young technical graduates having some experience in office or outside work for position with important railroad. Address "M. A. 7," Engineering News, New York. 7-2t

WANTED immediately for South American railroad, first-class man to take complete charge of operating—freight and passenger. Must speak Spanish. Good salary to suitable man. State fully qualifications and send copy testimonials. Address "O. A. 7," Engineering News, New York. 7-1t

Specifications for Bridges
By THE OSBORN CO.
"General Specifications for Railway Bridges."
"Specifications for Metal Highway Bridge Superstructure."
Paper, 8 x 12 inches 25 cents each
The Engineering News Publishing Co.
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Areas of Right-Angled Triangles, with Slopes of ¼: 1 to 4: 1
Frogs and Switches for Various Gauges, etc.
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